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P R E F A C E.

CONSIDERING the Number of Books on the Theory and Practice of Architecture already published, any further Effort to illustrate and familiarize this MOST NOBLE ART, may seem superfluous and unnecessary; in me especially, who, by former Publications, have endeavoured to advance the young Practitioner in the Knowledge of his Profession.

But as Art is improving, greater Experience enables to discern the truly useful, and thereby to confirm or reject former Methods.

The very great Revolution (as I may say) which of late has so generally prevailed in the Style of Architecture, especially in the decorative and ornamental Departments, will evince the Necessity and eminent Utility of this Publication. That Taste (so admirable in our modern Buildings) which is vainly sought for in any other practical Treatise, the Workman will here find illustrated in a great Variety of useful and elegant Examples.

The Deficiencies and confined Plans of those Books now used by Workmen, is another Inducement to collect together in one View, the most easy and certain Rules to carry on the Building Art. These now offered are the Result of Experience, and have long been used by the Author in conducting Business, who now offers them to the Public as a general practical Treatise, wherein his great Care has been, plainly and faithfully to answer the Purpose of the manual Artificer: It is not meant to instruct the professed Artist, but to furnish the Ignorant, and supply the Uninstructed, with such a comprehensive System of Practice, as may lay a solid Foundation for their Improvement, and thereby enable them to execute with Ease and Precision the various Branches of the Profession.



# TABLE OF CONTENTS.

|                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><i>Plate</i></p> <p>1 —</p> <p>2 —</p> <p>3 —</p> <p>4 —</p> <p>5 to 9</p> <p>10 —</p> <p>11 —</p> <p>12 —</p> <p>13 14</p> <p>15 —</p> <p>16 —</p> <p>17 —</p> <p>18 —</p> <p>19 —</p> <p>20 —</p> <p>21 —</p> <p>22 —</p> <p>23 —</p> | <p><b>N</b>ICHES, Ellipfes, raising Perpendiculars, use of the Tramel, and how to make ditto, &amp;c.</p> <p>Plan and Section of Groins, veneering Niches, &amp;c.</p> <p>Circular Arches in a circular Wall, circle Arches, Soffits, &amp;c.</p> <p>Groins, Angle Brackets, Circular and Flewing Soffits.</p> <p>Sections of Floors, Trussing Roofs in Ledgerment, Girders, length and backing of Hips, strait and curved Trusses for Roofs, Domes, &amp;c.</p> <p>Mouldings, Ballusters, &amp;c.</p> <p>Inter-columniations</p> <p>Pedestals</p> <p>Proportions of the Five Orders</p> <p>Tuscan Frontispiece, Base, Capital, and Entablature</p> <p>Doric ditto</p> <p>Ditto Entablature at large.</p> <p>Ionic Frontispiece, Base, Capital, and Entablature.</p> <p>Ditto Entablature at large.</p> <p>Modern Ionic Capitals and Volute at large.</p> <p>Gluings up ditto.</p> <p>Antique Ionic Capital.</p> <p>Ionic and Corinthian Base, and Pedestal at large.</p> | <p><i>Plate</i></p> <p>24 —</p> <p>25 —</p> <p>26 —</p> <p>27 —</p> <p>28 —</p> <p>29 —</p> <p>30 —</p> <p>31 —</p> <p>32 to 37</p> <p>38 —</p> <p>39 to 48</p> <p>49 —</p> <p>50 —</p> <p>51 —</p> <p>52 to 58</p> <p>59 to 61</p> <p>62 to 65</p> <p>66 to 74</p> <p>75 to 83</p> | <p>Corinthian Capital and composed ditto.</p> <p>Ditto Entablature.</p> <p>Gluings up the Corinthian Capital.</p> <p>Antique Composite Capital.</p> <p>Composite Capital and Entablature.</p> <p>Planceers for Cornices.</p> <p>Gluings of Columns.</p> <p>Imposts.</p> <p>Frontispieces, Windows, and Doors, with their Entablatures, Mouldings, &amp;c.</p> <p>Open Pediment and raking Cornice.</p> <p>Chimney-Pieces with their Moulding and Ornaments.</p> <p>Mouldings for Pictures and Glass Frames.</p> <p>Ornaments for Friezes, Pilasters, &amp;c.</p> <p>Cornices for Doors, Chimneys, &amp;c.</p> <p>Bases, Sub-bases, Architraves, &amp;c.</p> <p>Cornices for Door-Caps, Chimney-Caps, Rooms, &amp;c.</p> <p>Ceilings, Frets, Guilloches, &amp;c.</p> <p>Stair-Cases.</p> <p>Gentlemen's Houses, Green-houses, Hot-houses, Stabling, Farm-houses, &amp;c.</p> |
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# A TABLE for the Cutting of Timber for Building.

## Bearing Post.

| Height    |                 |
|-----------|-----------------|
| If 8 Feet | 9 Inch. square. |
| — 10 —    | 10 by 9         |
| — 12 —    | 11 — 12         |
| — 16 —    | 14 — 15         |
| — 20 —    | 16 — 18         |

## Beams or Ties.

| Length  | Inches  |
|---------|---------|
| 12 Feet | 7 by 8  |
| 16 —    | 8 — 9   |
| 20 —    | 9 — 10  |
| 30 —    | 10 — 11 |
| 40 —    | 12 — 11 |
| 50 —    | 13 — 12 |

## Girder's Bearing.

| If 10 Feet | 10 by 9 In. |
|------------|-------------|
| — 12 —     | 11 — 10     |
| — 14 —     | 12 — 11     |
| — 16 —     | 12 — 13     |
| — 18 —     | 13 — 14     |
| — 20 —     | 15 — 14     |
| — 24 —     | 15 — 16     |
| — 30 —     | 16 — 18     |

## Small Rafters.

| Bearing | Inches |
|---------|--------|
| 8 Feet  | 5 by 3 |
| 10 —    | 7 — 3  |
| 12 —    | 8 — 4  |

## Principal Rafters.

| Length             | Bot <sup>m</sup> | Top. | Thick |
|--------------------|------------------|------|-------|
| From 12 to 16 Feet | 8 —              | 6 —  | 5     |
| From 16 to 20 —    | 9 —              | 7 —  | 6     |
| From 23 to 24 —    | 10 —             | 8 —  | 7     |
| From 24 to 30 —    | 12 —             | 10 — | 9     |

## Binding Joists.

| Bearing | Inches. |
|---------|---------|
| 6 Feet  | 6 by 4  |
| 8 —     | 7 — 4   |
| 9 —     | 8 — 4   |
| 12 —    | 10 — 5  |

Purlins from 8 by 5 to 9 by 7 or 10 by 8.

## Bridging Joists.

Whose Bearing should not exceed 5 Feet,  
and Scantling not less than 6 by 4.

Raising Plates from 7 by 5 to 8 by 6, or  
10 by 8.

## Common Joist.

| Bearing | Inches |
|---------|--------|
| 6 Feet  | 6 by 3 |
| 9 —     | 9 — 3  |
| 12 —    | 12 — 4 |

Ground-fills the same as raising Plates.



To Face PLATE I.

Figure *A* and *B* are ribb'd NICHES for Plaistering.

THE Plan *a* is a Semi-Ellipsis on the Transverse Diameter, which is drawn with a Trammel as represented in the Plan, which is to be made with a Groove at Right Angles as in the Figure; two Pieces to be mortised to slip on the Rod, and one fixed at the End for a Pencil, &c. fix one of the Pieces equal to half the Conjugate Diameter, and the other to half the Transverse Diameter, and moving the Rod with the Pins in the Grooves, the Pencil will describe the Semi-Ellipsis.

To draw the Ellipsis *c* to any given Length and Breadth, take half the Conjugate Diameter *a b*, and set it on the Transverse Diameter *d c*, divide *c a* into three equal Parts, and make *c e* equal to one of those parts, and with the Radius *e f* bisect *g g*. So the Points *e f* and *g g* are the Centres for drawing the Ellipsis to any Length and Breadth.

To draw the Ellipsis *d* with a Line, take half the Transverse Diameter *b a*, and set it from *c* on the Conjugate Diameter to *d* on the Transverse Diameter, and to *e* on Ditto; then *e d* are the Points to be fixed for the Line to go round, which will describe the Ellipsis with the Point *f*.

To glue the Head of a Niche as figure *e*, cut the Arch Part of the Board of Stave to the Thickness of a Veneer, and bend it on a Templet, and back it to the Curve; it may be jointed the same as a Column, &c.

To describe a Polygon to a given side from five to eight Sides, make a Radius of the given Side for the Pentagon, divide the Arch into five Parts, turn one down on the Line which is the Centre, to describe a Circle which will contain the Side five Times.

For a Hexagon, the Radius of the Side is the Centre.

The Heptagon into seven Parts, and turn one up.

The Octagon into four, and turn one up.

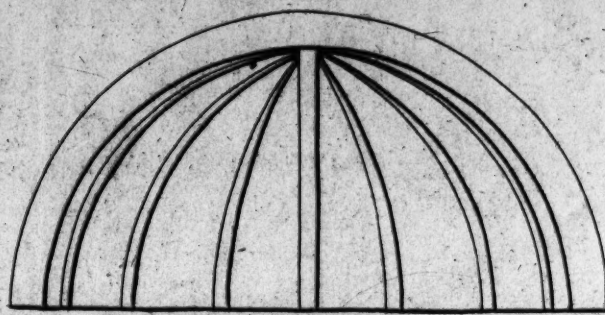
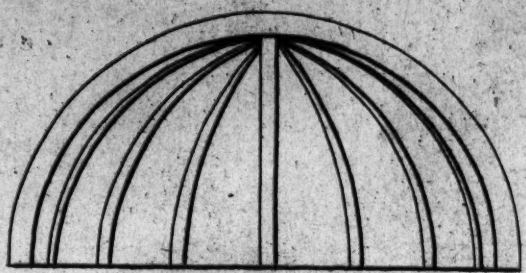
To raise a Perpendicular at the End or Middle of a Line. Describe the Arch *c d*, and with the Radius *a c* make *e f*, which bisected at *b*, gives the Perpendicular to *a*.

To let fall a Perpendicular from a given Point to a Base Line. Figure *G*; let *a* be the Point given to fall to the Base Line *b c*, draw a right Line from *a* at Pleasure to meet the Base Line as at *c*, more or less; divide the Line *c a* into two Parts, and draw the Semi-Circle *a b c*, and where the Circle cuts the Base Line at *b*, which will be at Right Angles with *a*, and is the Point required.

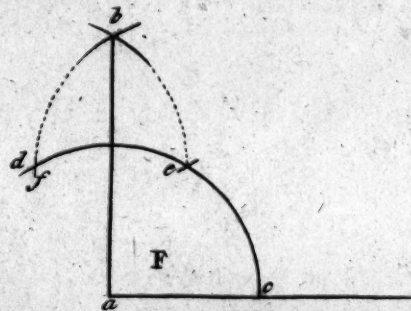
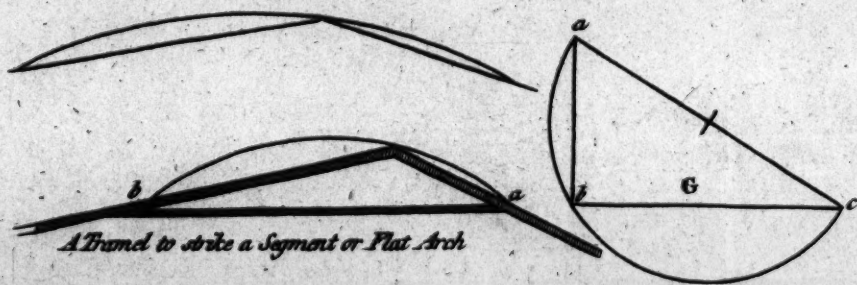
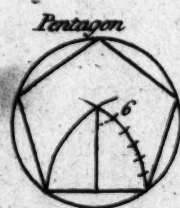
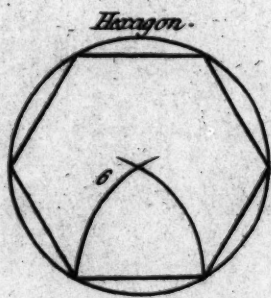
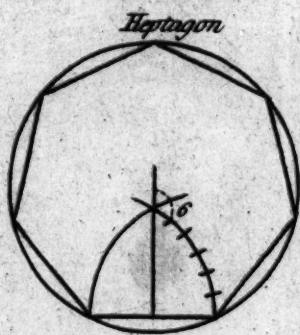
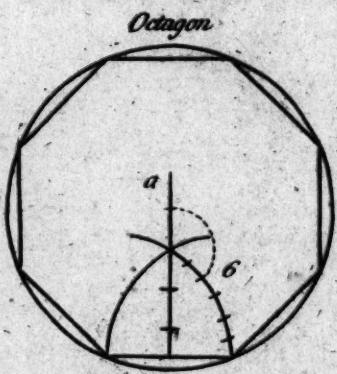
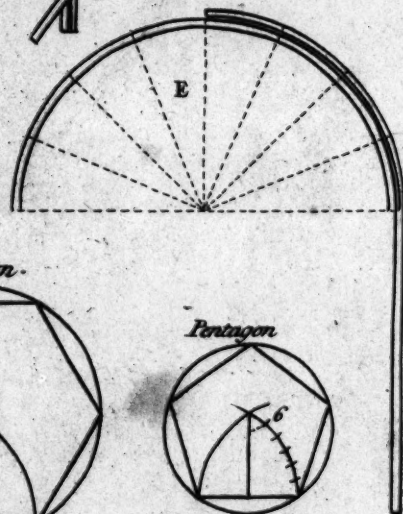
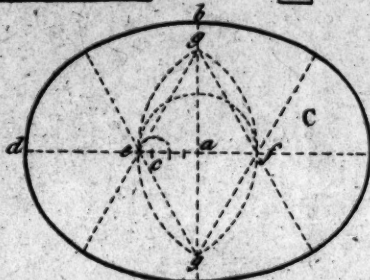
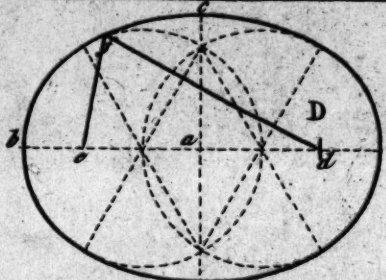
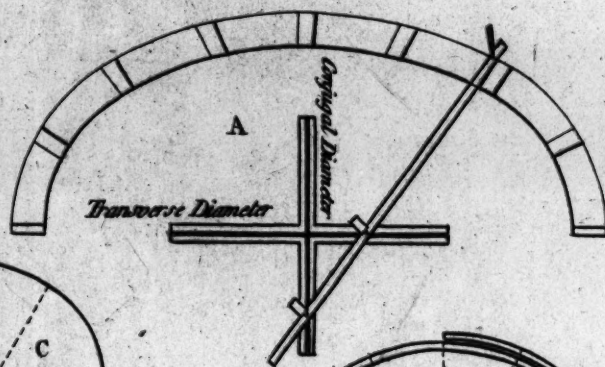
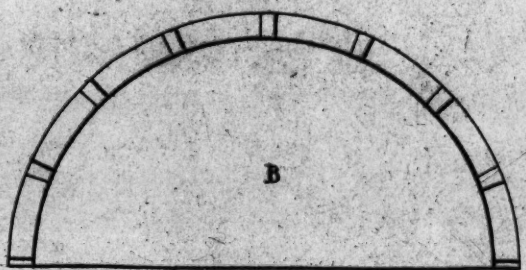


# *Niches, Polygons, Trameles &c.*

Plate I.



*The Trammel Rod*



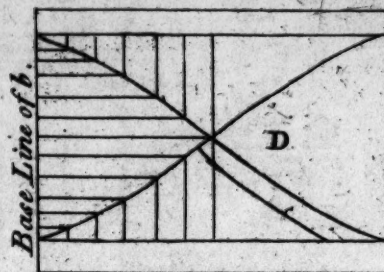
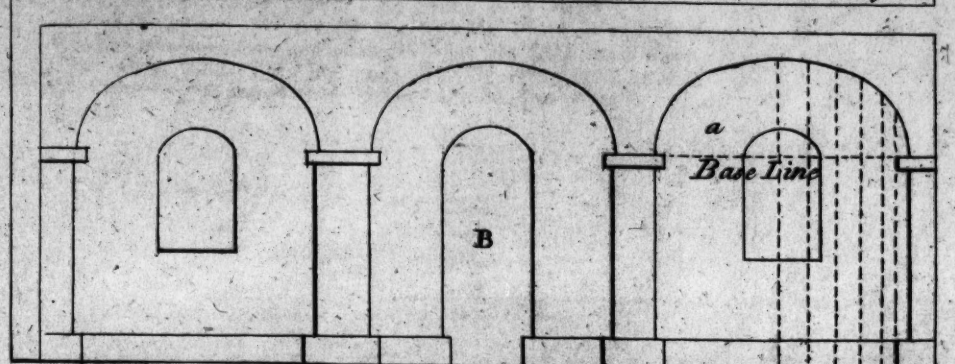






Plan & Section of Groins Finccring Niches &c.

Plate II.



The Arch line of a, Stretched out at length.

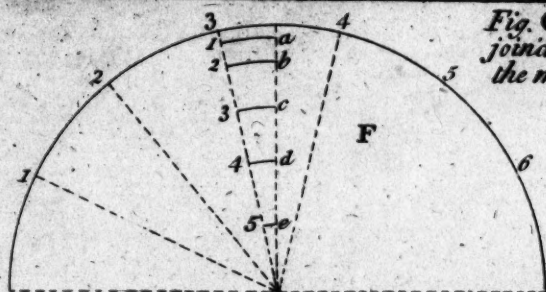
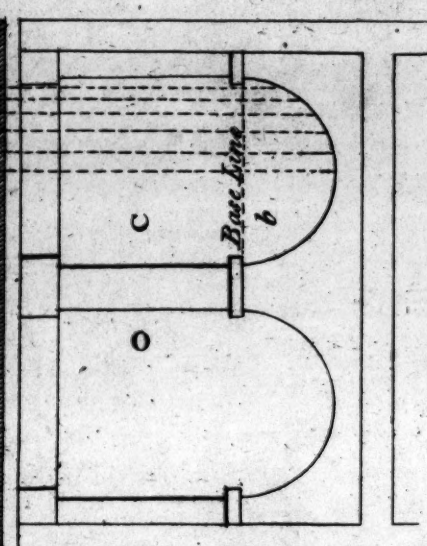
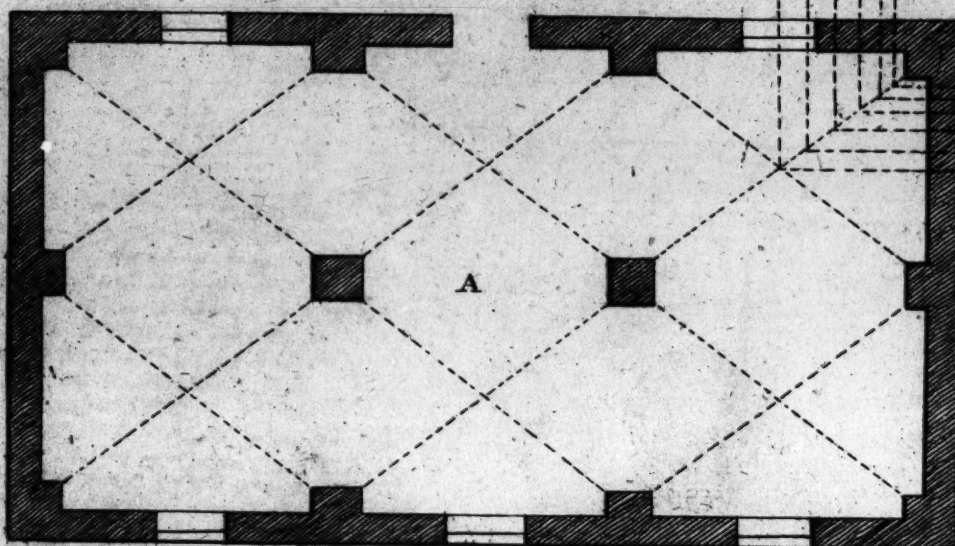
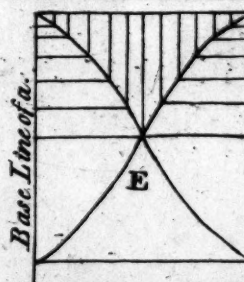
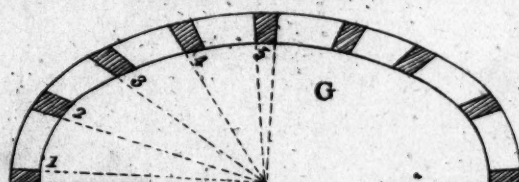


Fig. G, is a Ribbed Niche for plaistering with the Ribs all joined to y place where to stand the Edges are Borel so the mould must be shifted.



The arch line of b, Stretched out at length.

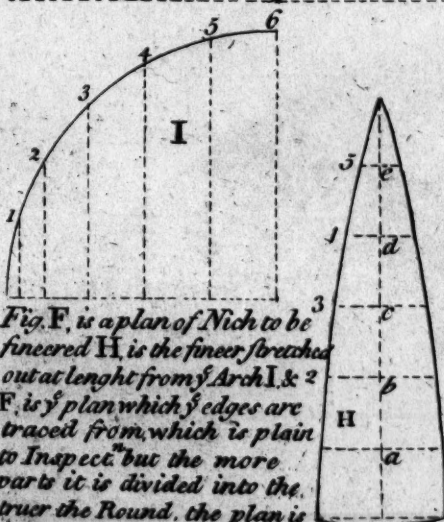


Fig. F, is a plan of Niche to be fineered H, is the fineer stretched out at length from y Arch I. & 2 F, is y plan which y edges are traced from, which is plain to Inspect but the more parts it is divided into the truer the Round, the plan is in 7 parts but in practice it may be into 15 parts or more at pleasure.

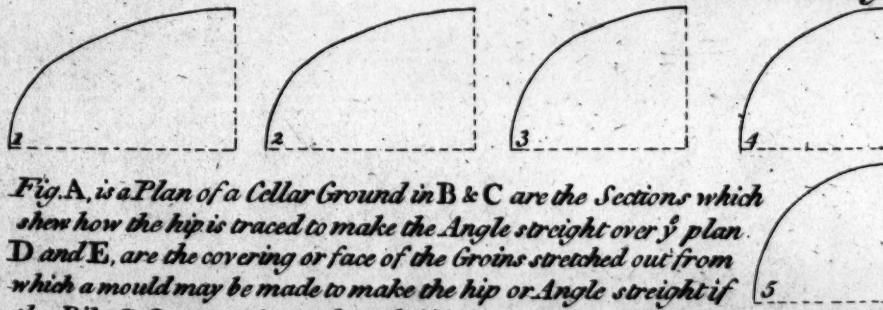


Fig. A, is a Plan of a Cellar Ground in B & C are the Sections which show how the hip is traced to make the Angle streight over y plan. D and E, are the covering or face of the Groins stretched out from which a mould may be made to make the hip or Angle streight if the Ribs C, O, are set first & boarded in the mould must be taken from E, but if the Arches in Section B, be set first the mould must be taken from D.







Fig. B. is an Arch standing on Flying Jambos in a Straight Wall and supposed to be a fair Arch in Stone or Brick. Divide the Round of the Arch in as many Parts as are Courses to Complet the Arch and drop them to the Wall Line, then Draw them cross the Wall, Parallel with the Jambos, and that shews how much is to be Cut of the Face of each Course.

*Circular Arches &c.  
in a Circular Wall.*

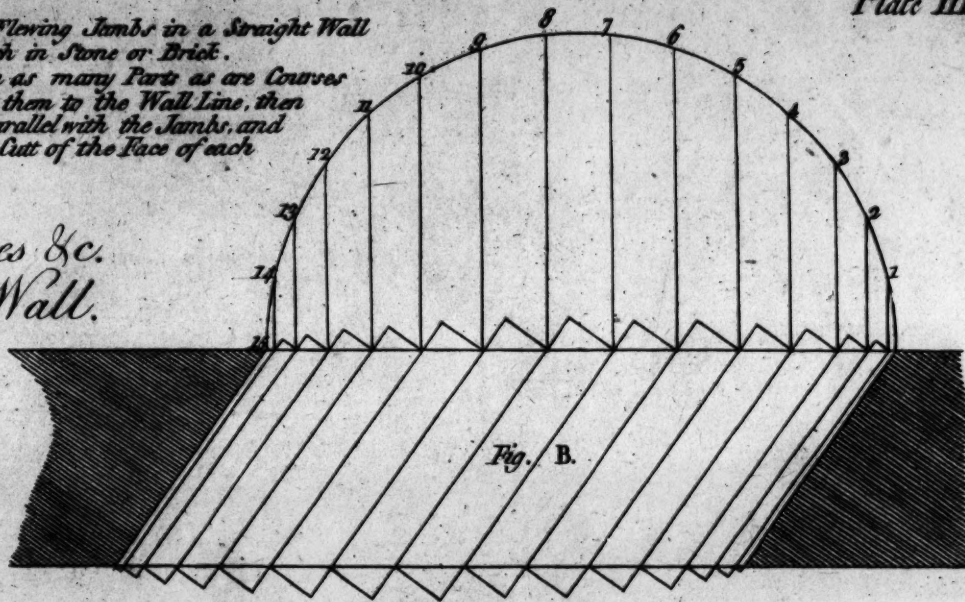
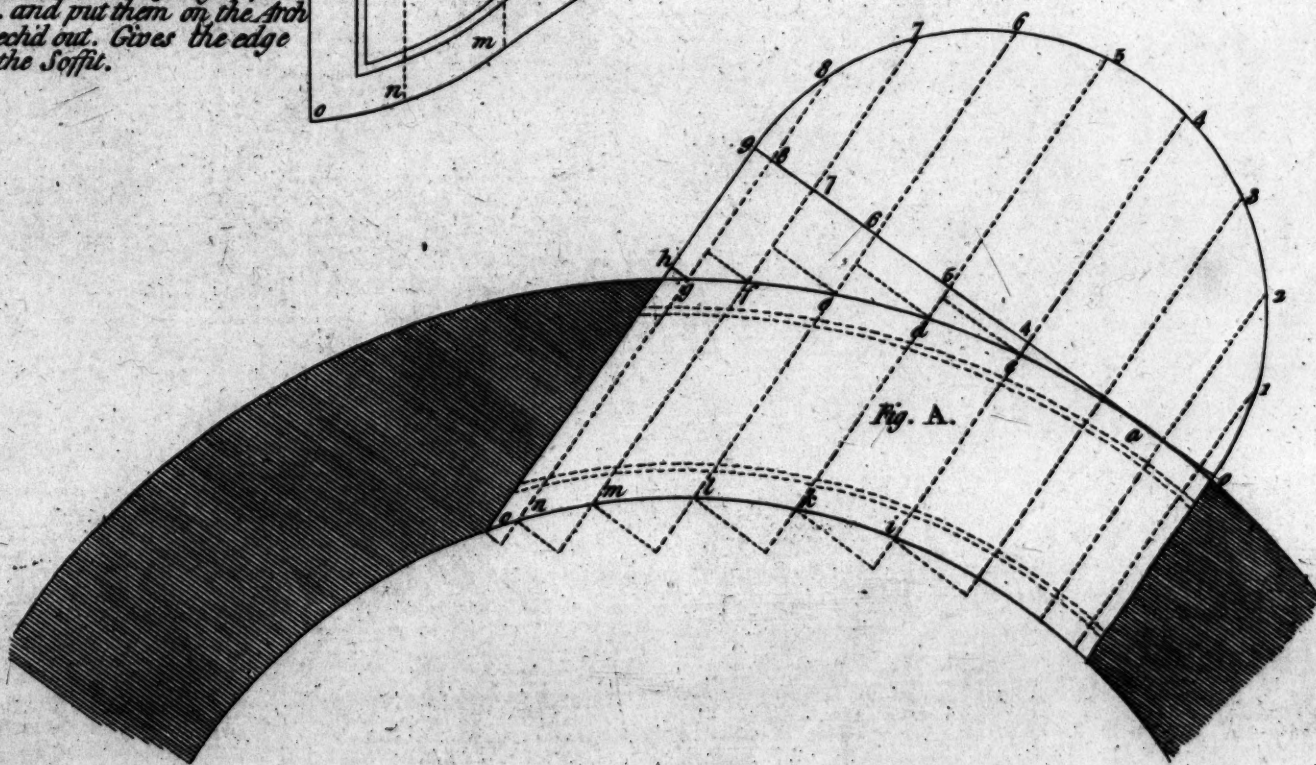
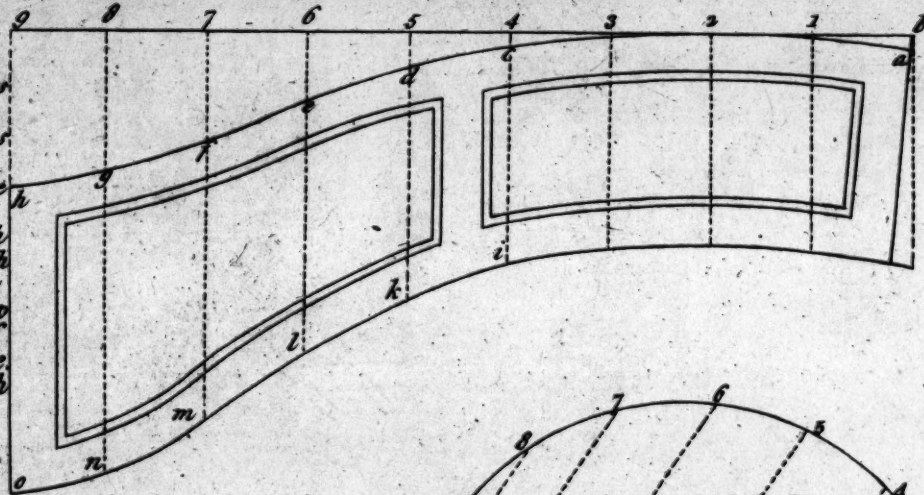


Fig. A. is a Circular Wall which has a Door or Window that stands Flying. Because the Jambos do not stand at Right Angles with the Diameter of the Circle, as in Plate IV find the Curve Line of the Soffit, in this Case draw the Cord Line or Base Line of the Arch, o, g at Right Angles with the Jambos o, h to touch the Arch of the Wall at a, and Divide the Arch into equal Parts and drop them to the Wall then take of the Distances, h, g, g, g, 7, f, b, e, &c. and put them on the Arch stretch'd out. Gives the edge of the Soffit.













To Face *PLATE IV.*

Figure *A* is a PLAN to be GROIN'D.

**D**IVIDE the Base Line *a* of the given Rib into equal Parts, and that of *d* into the same Number of Parts, and draw Lines to the Arch Line of *a*, and likewise in *d* at Pleasure; then take 1, 2, 3, 4, 5, 6, &c. from *a*, and transfer them to *d*, as 1, 2, 3, 4, 5, 6, &c. and through the Point 1, 2, 4, 6, 8; trace the Arch Line over *d*, and so for the Rest, as is plain to Inspection. The Angle Bracket is done in the same Manner.

*To describe a circular Soffit in a circular Wall, as in B.*

Draw the Cord Line of the Arch, or Base Line so called, to touch the Arch of the Wall; then draw the Semi-Circle and divide the Round of it in a Number of equal Parts, as here into 9, but the more Parts the truer the Work, and draw them to the Arch of the Wall; then stretch out the Arch Line at Length as in *e*, and transfer the Parts that are between the Wall and Base Line, as 1, 2, 3, 4, 5, 6, &c. to *e*, which gives the Edge of the Soffit or Pannel.

*To describe a circular Soffit in a strait Wall on flewing Jambs.*

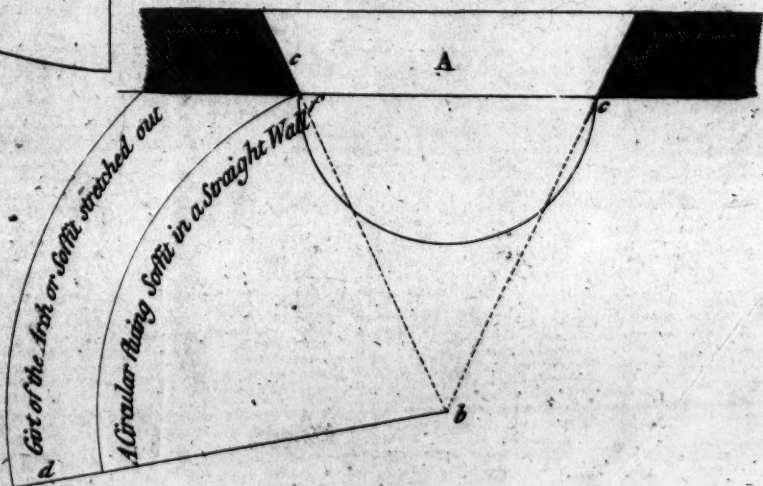
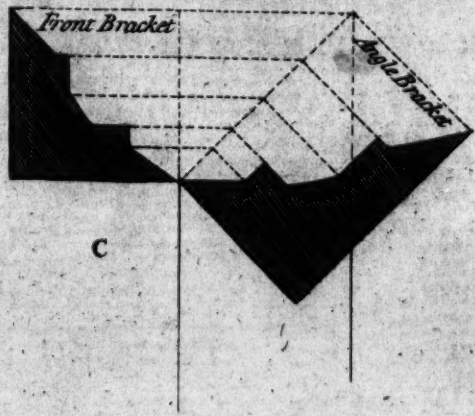
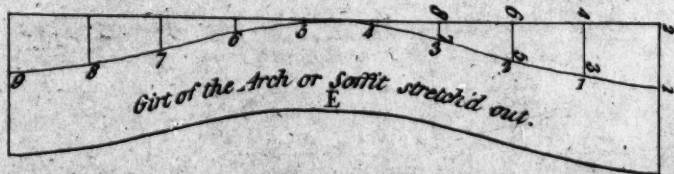
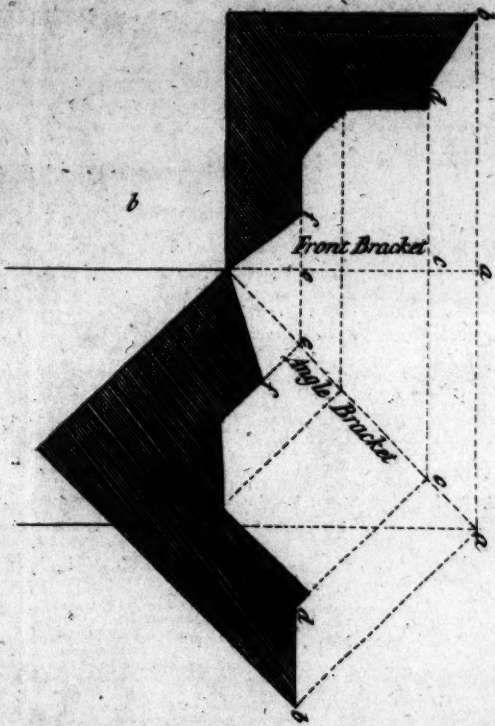
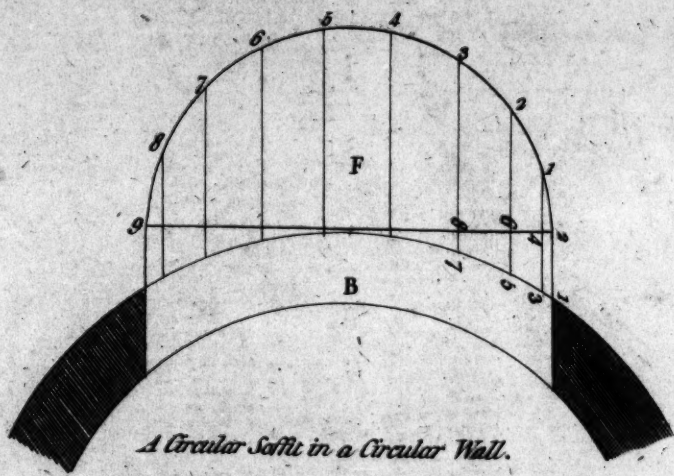
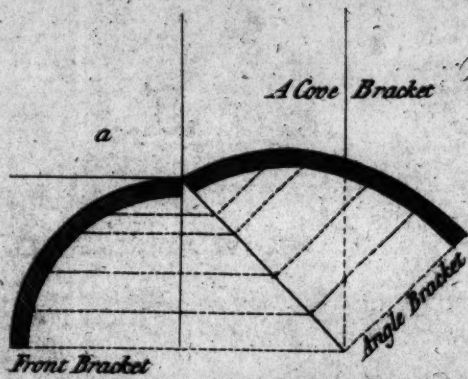
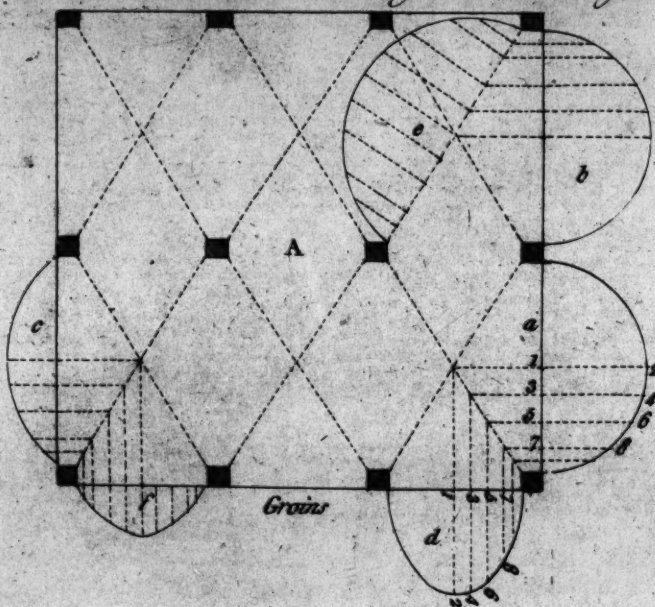
Continue the flewing of the Wall till it meets at *b*, then set the Compasses at *b*, and draw two Arches to the Thickness of the Wall; then put on the Girt of the Soffit *c d*, which gives the Length of the Soffit and Edge of ditto.

D



*Groins, Angle Brackets &c.*

*Plate IV.*



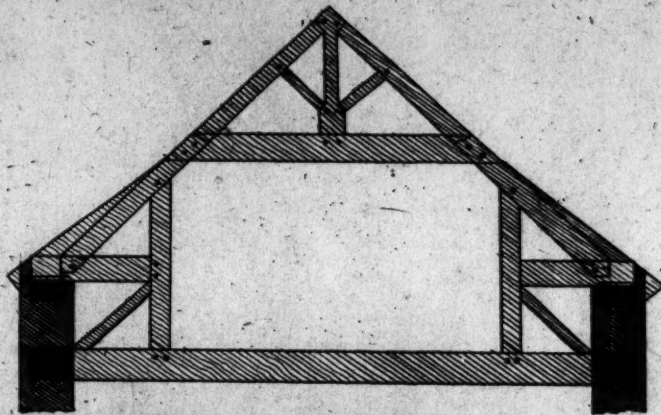
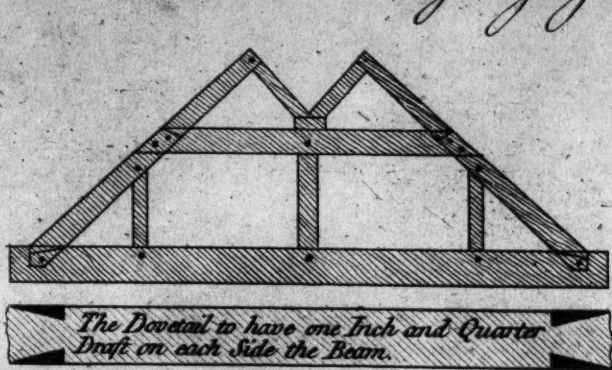




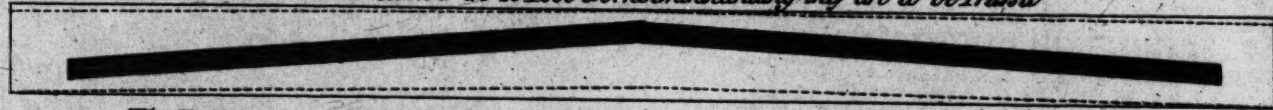


# Trussing Girders Floors &c.

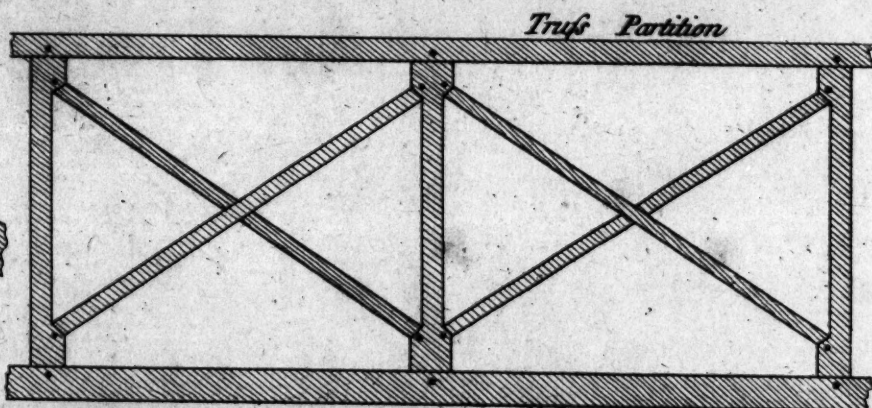
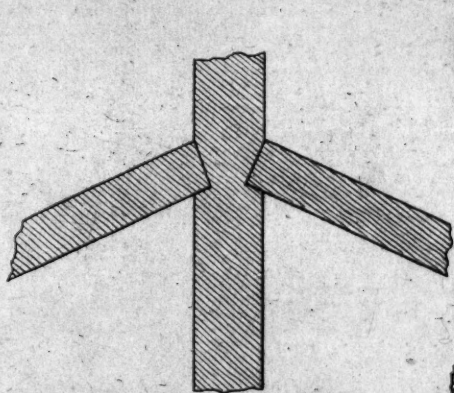
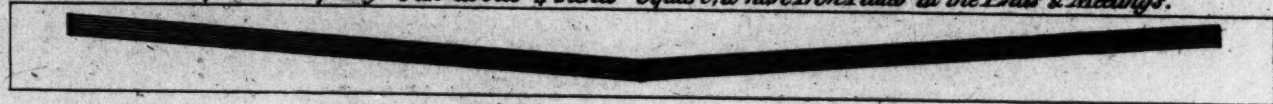
Plate V.



The Girder to be Cut one Inch Camber in 20 Foot &c. notwithstanding they are to be Truss'd



The Truss to be of Dry Oak about 4 inches Square, to have Iron Plates at the Ends & Meetings.

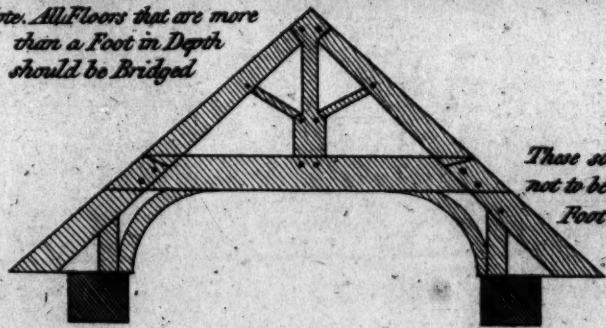


Section of a Bridge Floor



Section of a Floor with the Binding Joist the whole Depth.

Note. All Floors that are more than a Foot in Depth should be Bridged



with three Joists in the interval between the Binding fram'd into the Girders the same way with Binding Joists but not so Deep as ditto as a.b.c. &c.

These sort of Floors not to be more than a Foot in Depth



Curb Roof.











To Face *PLATE VI.*

Figure A, Plan and Ledgment of the Roof, shewing how to find the Length and Backing of Hips, Valley, &c.

**T**O find the Length, take the Base Line of the Hips  $a b$ ,  $b c$ , and  $b e$ , and set them on the Base Line of the principal Rafters, as  $b a$ ,  $b c$ ,  $b e$ , and draw Lines from the Top of the Rafter to  $a c e$ , which is the Length of each Hip. Or the Length may be found by setting up the Perpendicular from the Base Line of the Hips, as  $b g$ , and draw the Line  $g a$ , is the Length of the Hip. To back the Hip, lay down the Thickness of the Hip at the Angle of the Plan, as  $H$ , and draw Lines to range the Plates, will shew how much Wood is to come off in the Backing; that is, the Mould must be a Piece of Wood as thick as the intended Hip, and cut it to the Splay or Pitch of the Hip at the Foot, setting it on the Angle of the Plate in the Direction of the Hip, mark it under by the Side of the Plate; gives the true Backing in any Case required. A very sure and safe Way for the Backing.

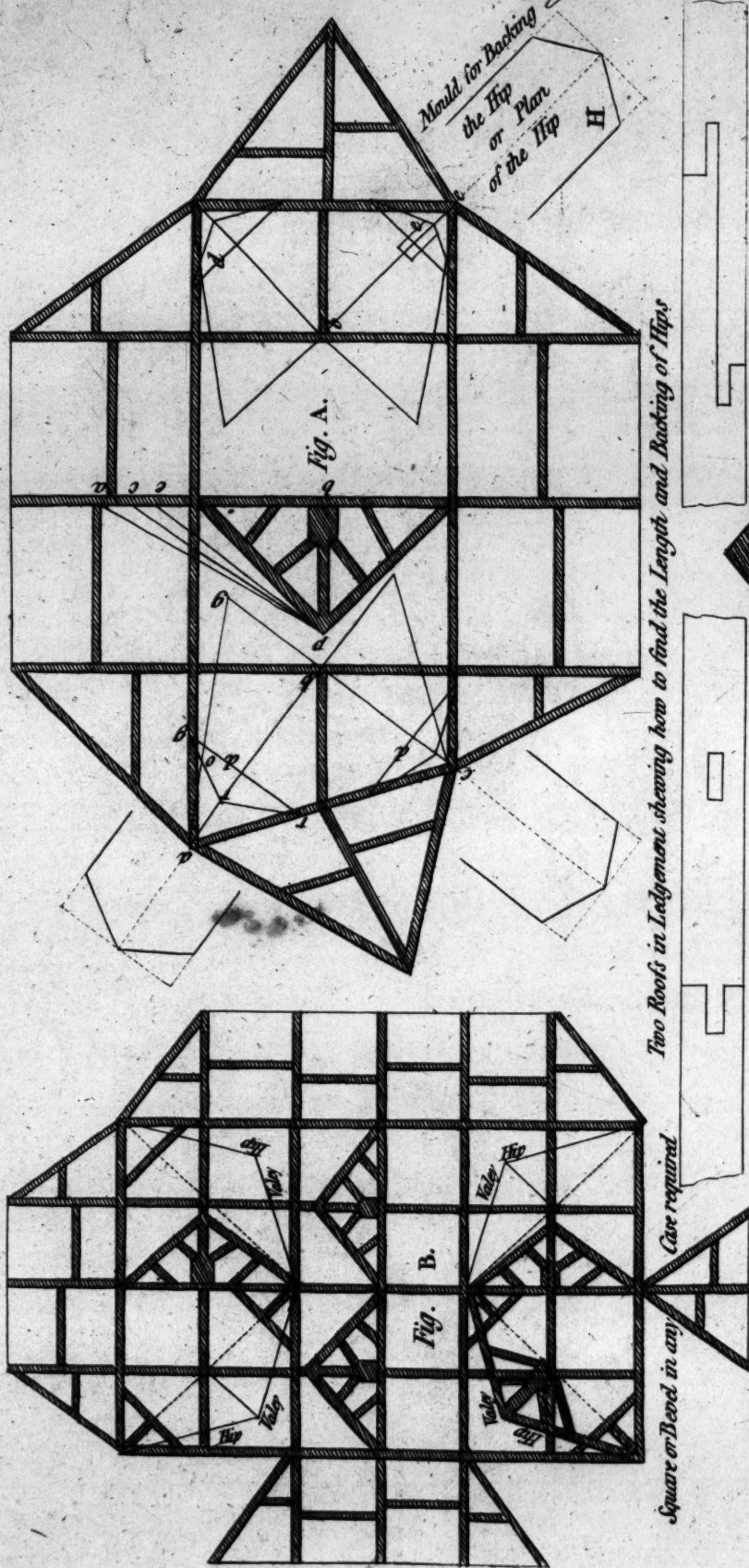
Figure B is the Plan of an M Roof, with Hip and Valley in Ledgment, &c.

*Note,* The Back of the Hip is found another Way, as in the Plan A, by drawing a Line at Right Angles, cross the Base of the Hip, as  $r d g$ , or on any Part of the Base Line, and set one Foot of the Compass at  $d$ , and extend to the nearest Part of the Hip  $g a$ , and turn it on the Base Lines as at  $r$ , then draw the Lines from the Point  $r$  to  $g r$ , on the Edge of the Plate, which is the Backing of the Hip required. This will do in any Case, square or bevel.

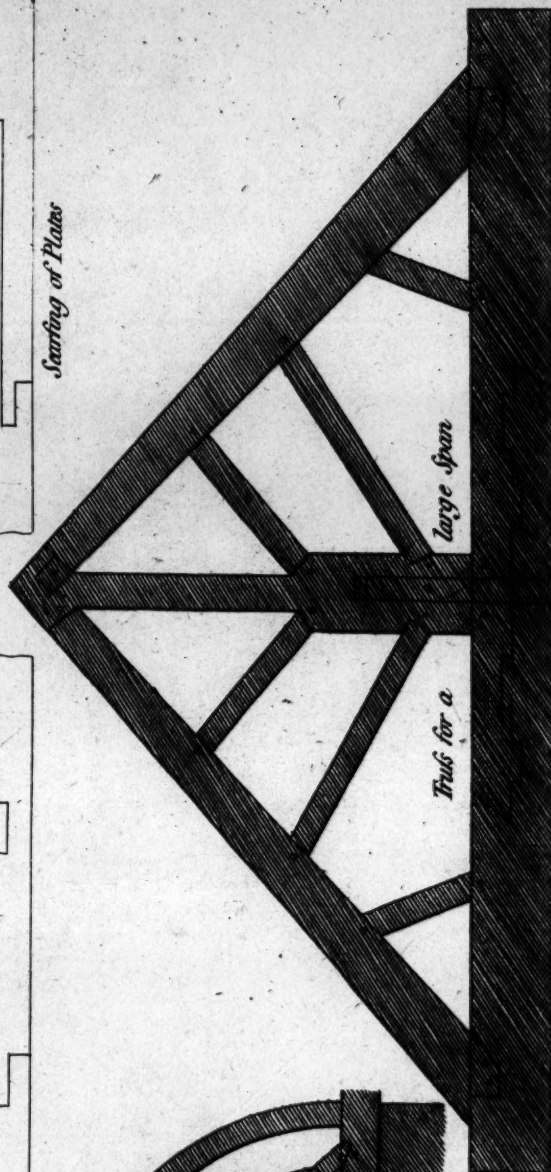


# Plan of Ledgment of Roofs.

Plate VI.



Two Roofs in Ledgment shewing how to find the Length and Backing of Hips





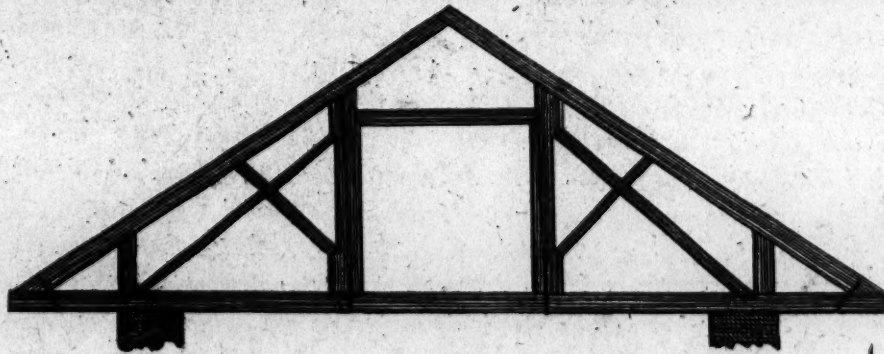
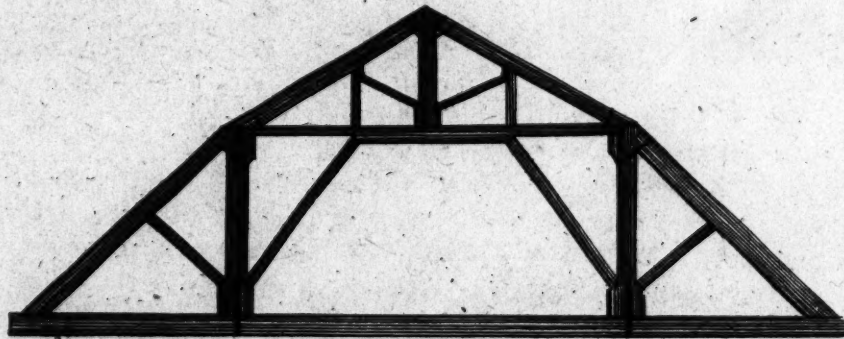
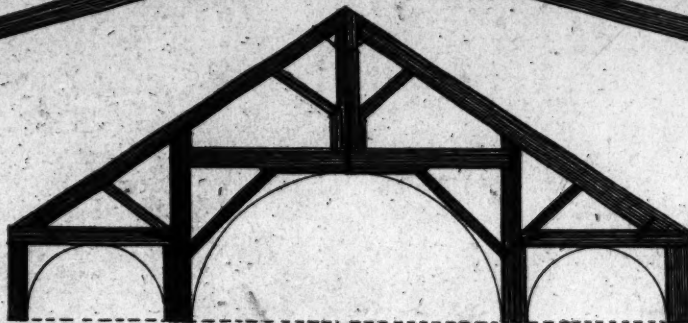
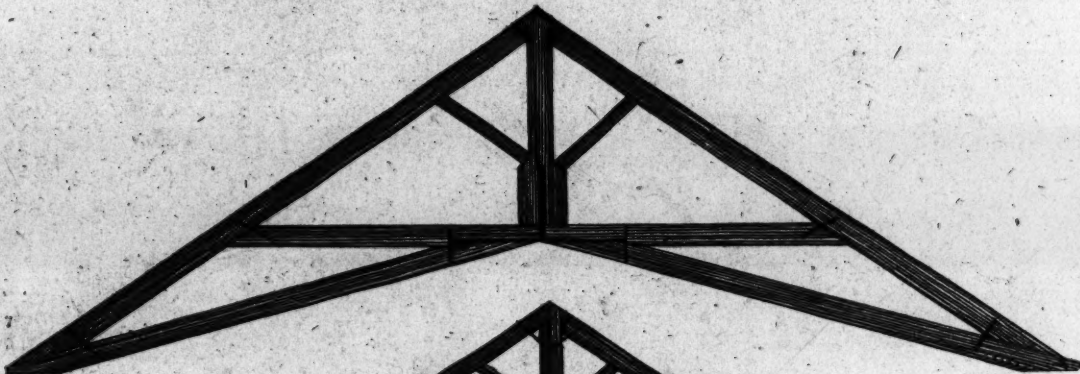
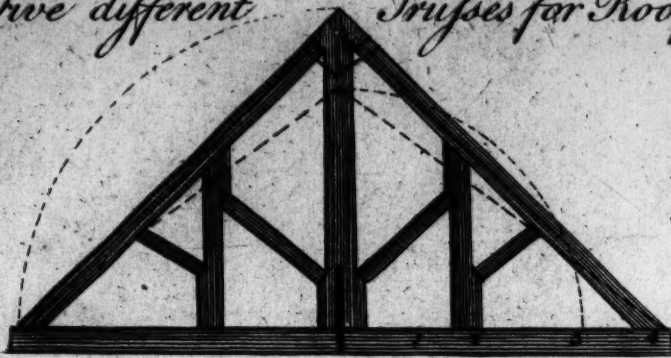




*Five different*

*Trusses for Roofs.*

*Plate VII.*



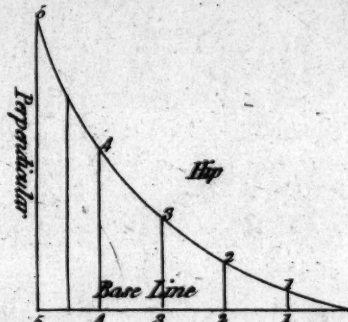
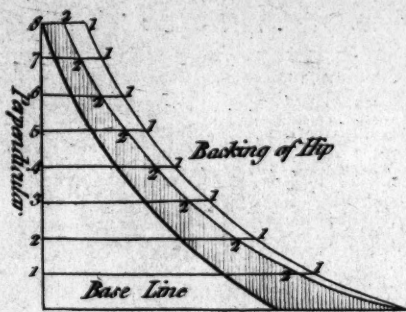
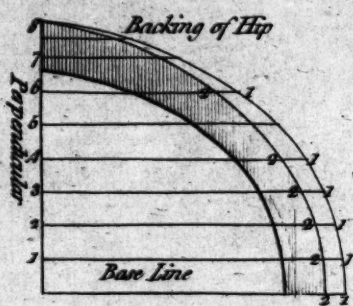
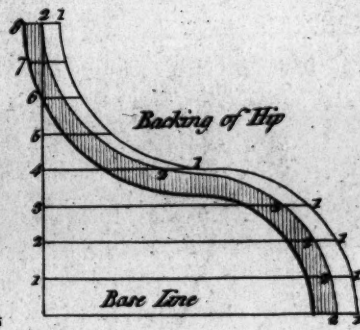
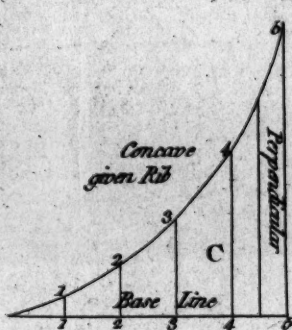
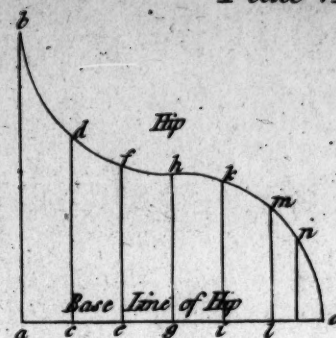
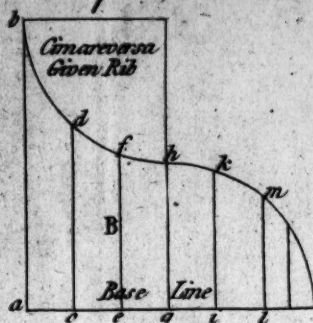
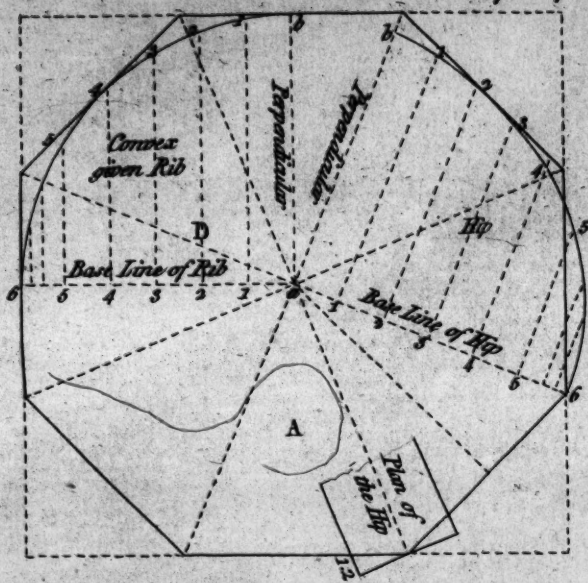






# Hips for Roofs &c.

Plate VIII.



The manner of finding the Length and Backing of Curve Line Hips in any Case required. Suppose the Octagon. Plan A. to be Roof'd with the Convex B. or the Concave C. or the Convex D. in the Plan. Divide the Base Line of the given Rib into any number of equal Parts and draw Lines from those parts on the Base Line to the Back of the Rafter. a b. c d. e f. g h. i k. l m. and all the others as 11. 22. 33. and so on. Then the Base Line of the Hips must be divided into the same number of Parts and Lines drawn up at Pleasure as a b. c d. &c. from the Base Line of the Hips, then take the several Heights of the given Ribs and set them on the Hip Lines, then trace them through those Points b d. f h. k m. n o. that will give the Curve or Edge of the Hip and the same for all the others and for the Backing of the said Hips. there is a Plan of the Hip at the Angle of the Plan A. which shows how much Wood is to be Cutt off each side of the Hip. Divide the Perpendicular Height of the Hips into any number of equal Parts, and draw Lines Parallel with the Base Lines of the Hip. Then take the Distance from the Plan of the Hip to the Side of the Plan A. as 1 2 and put them on the Hips, as 1 2. 1 2. &c. which gives the true Backing in any Case required. Note when the parts are Set on at Bottom and Top of the Hip the Mould may be shifted and mark'd which shows the Wood to come off.











To Face *PLATE IX.*

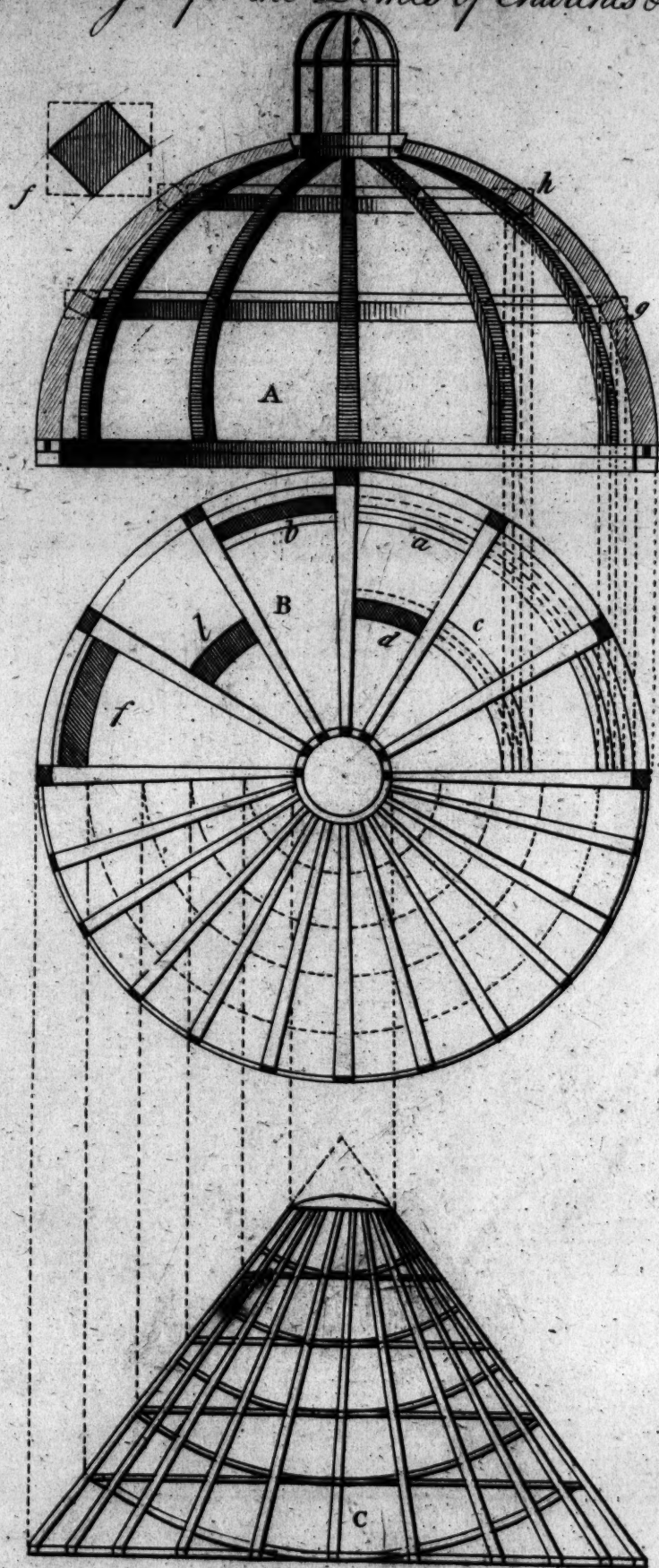
TRUSSES for DOMES of Churches, &c.

**A** Is a Truss for a Dome, with a Lanthorn or Cupola at the Top, to give Light. **B** the Plan; the Kirb or Plate to be in two Thicknesses, which is likewise best for the Ribs, and for the Kirb on which the Cupola stands. The Curve of the Dome *A* is a Semi-circle, or will serve for a Semi-ellipsis. The Moulds *f* and *c* in the Plan **B** cut the Sweep of the Purlines; and the Moulds *b a* and *c d* are for the Top and Bottom of the Purlines. **C** is a Cone or Lanthorn to light a Stair-case, &c.; the horizontal Bars must be squared in the same Manner as the Purlines in **A**. The Mould for cutting or squaring the Purlines, is like the Bottom Mould *f* in **B**, so that if the Purlines be cut to the Thickness required as in the Section **A**, and also to the Mould *f*, then *a* is the Mould for the Bottom, and *b* for the Top, as appears by the Lines let fall to the Plan **B** from the Purlines *g* and *h*; then **C** in the Plan is the Top, and *d* the Bottom Mould. *l* is the Sweep Mould for the Top of the Purline *h*. By this Rule the Purlines may be squared, which completes the Work. If in the Plan **B**, the Ribs and Purlines are in Size and Number as the Cone **C**, it will do for a Lanthorn or Light to a Stair-case, &c. The Manner of squaring the Ribs and Cross Bars is the same as the Dome.



*Trusses for the Domes of Churches &c.*

*Plate IX.*

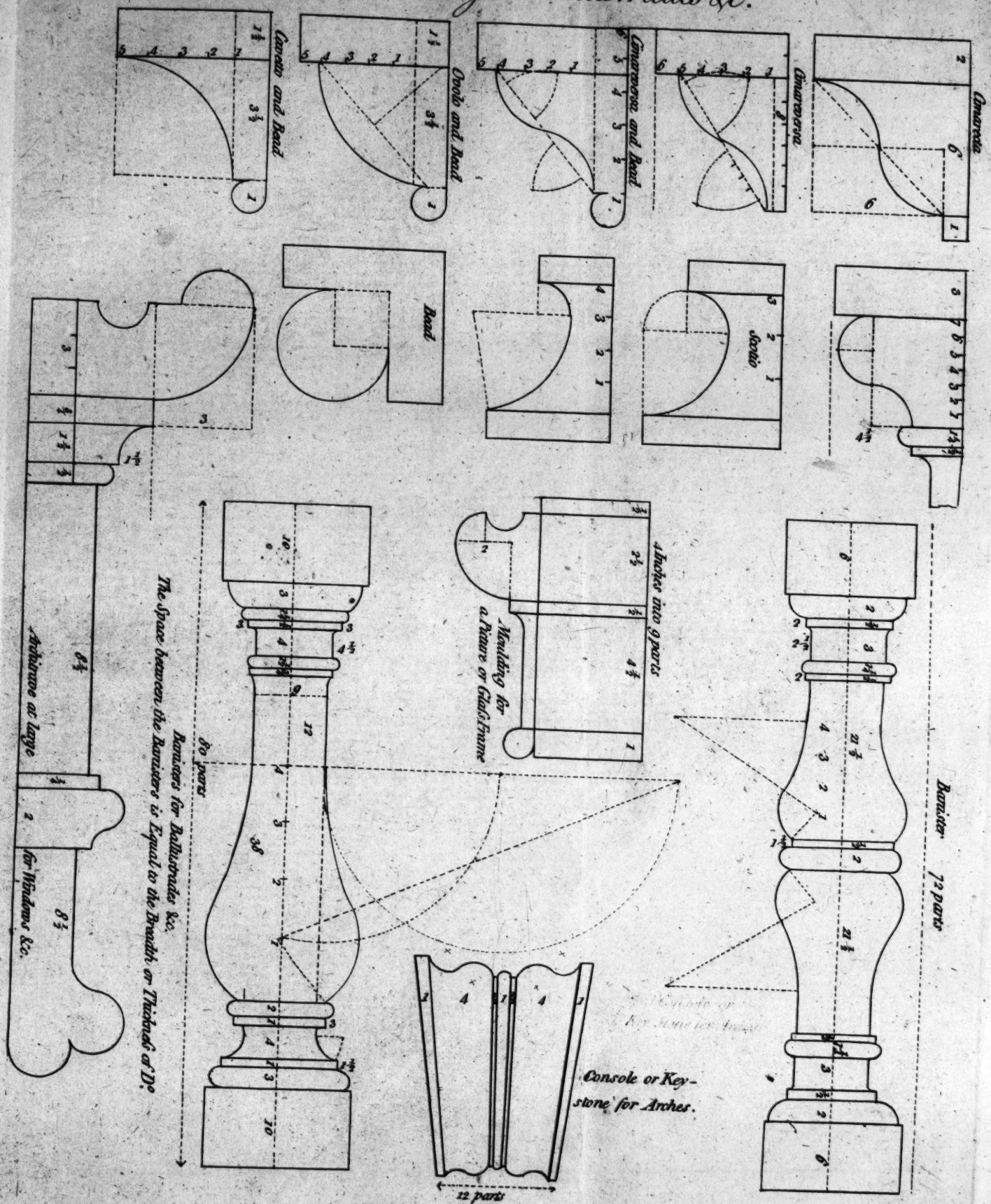








*Plate X.*



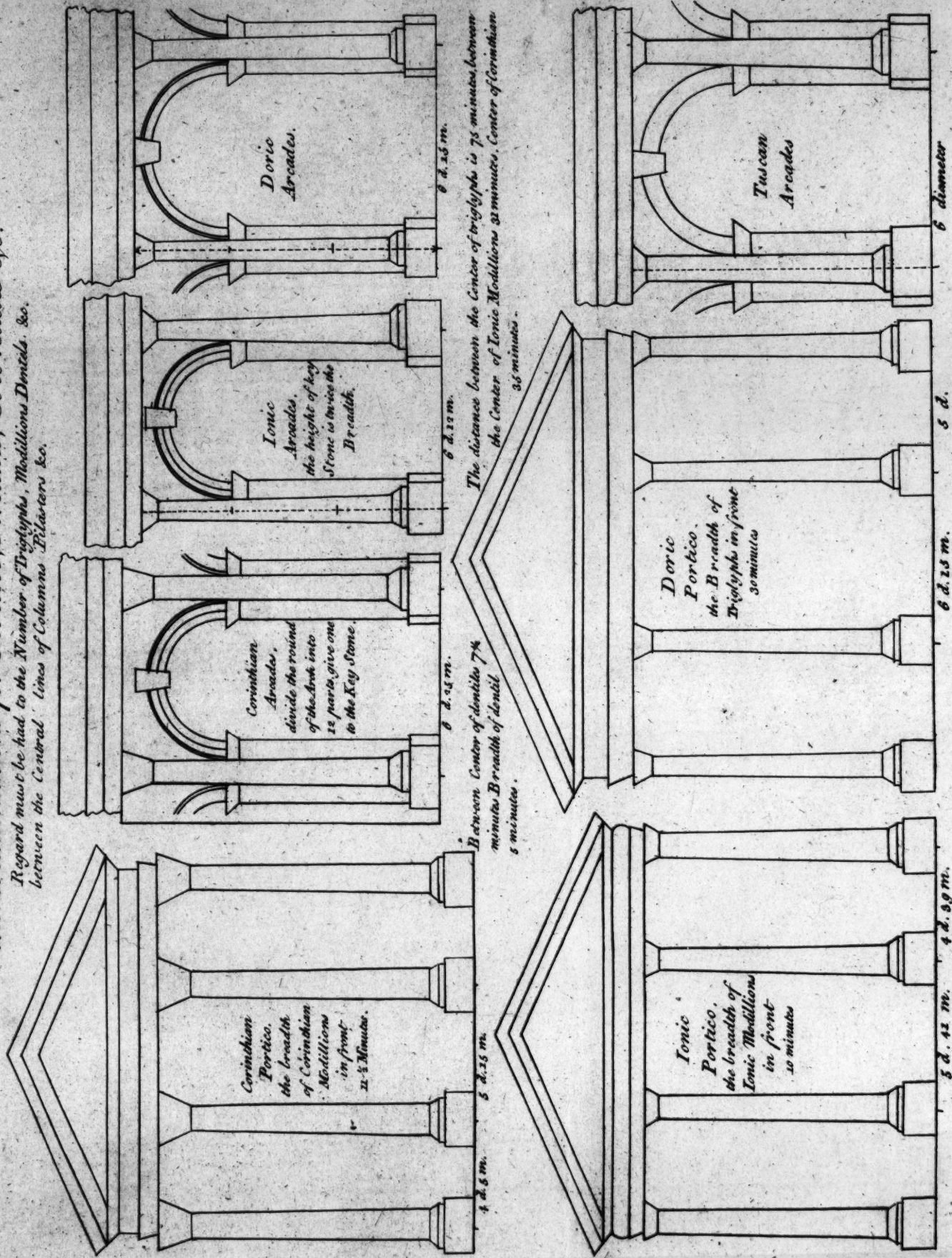






# *Intercolumniations for Porticos, Arcades, Colonnades &c.*

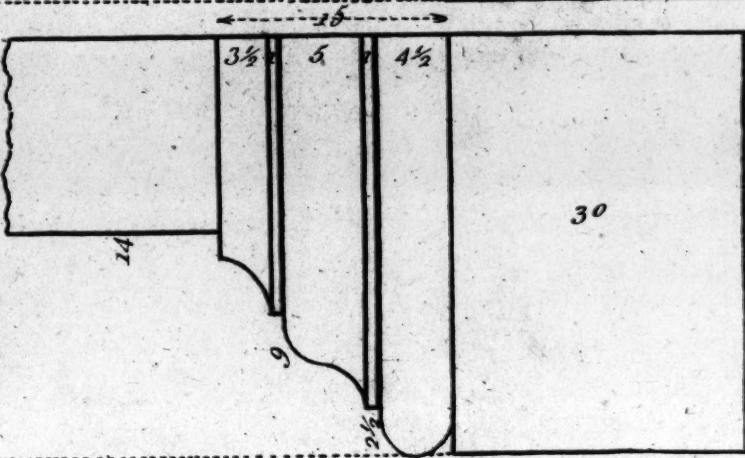
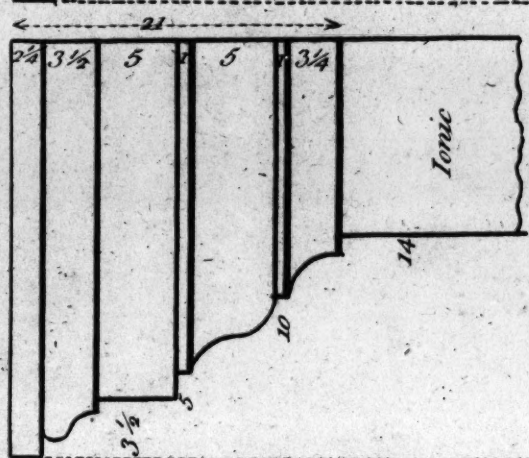
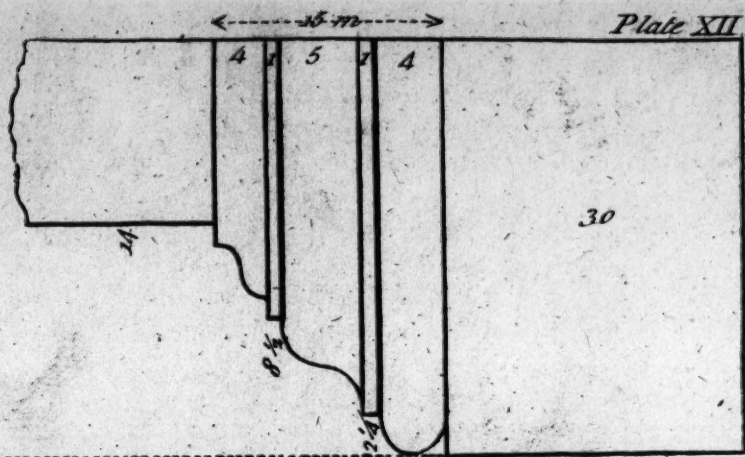
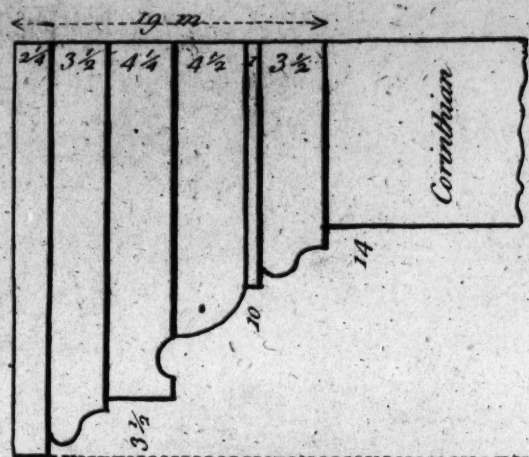
*Regard must be had to the Number of Trigllyphs, Modillions Dentils. &c. between the Central Lines of Columns, Pilasters &c.*



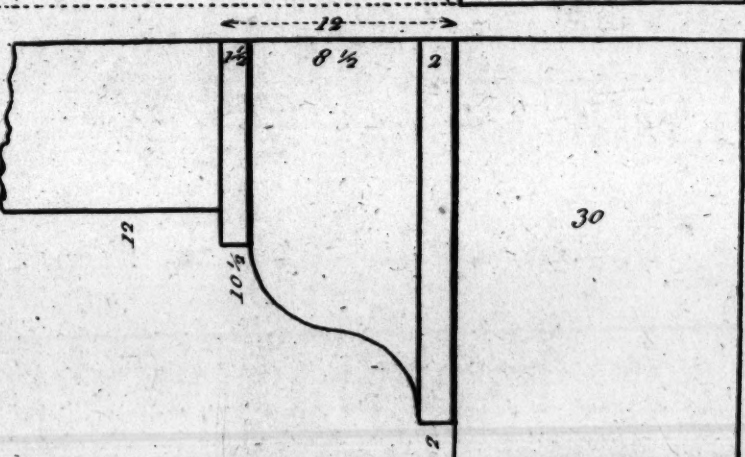
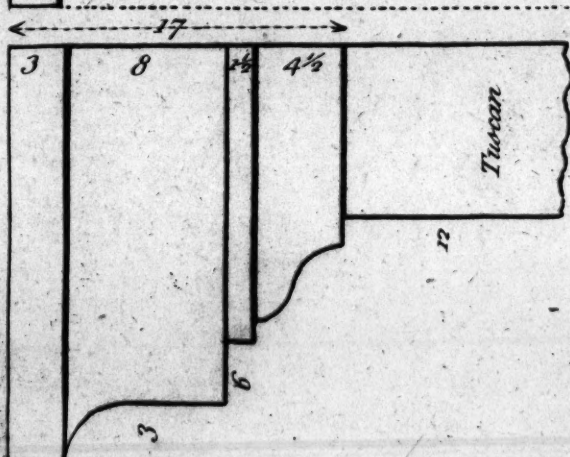
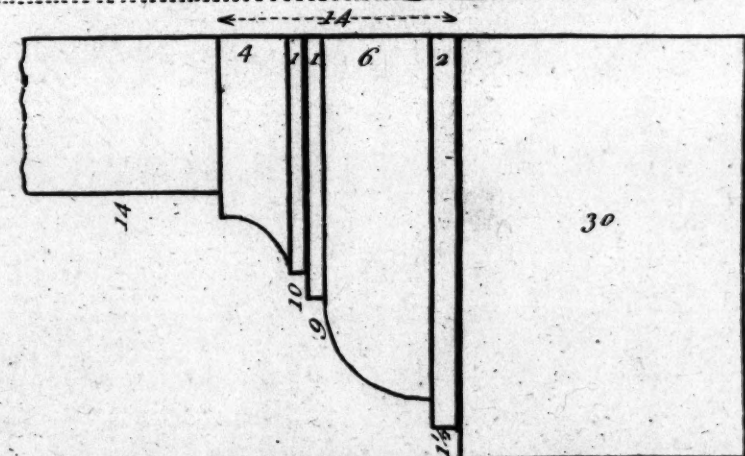
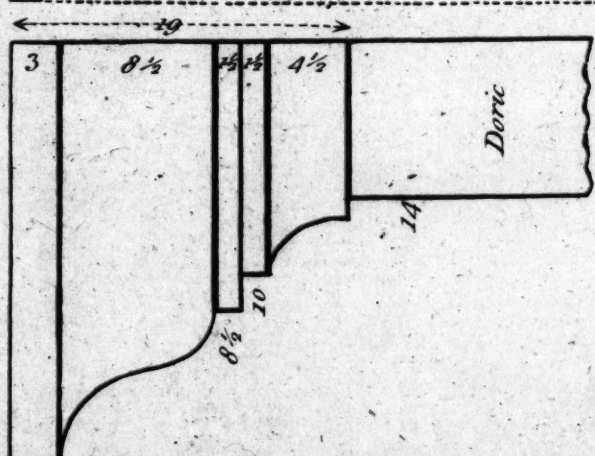








*Pedestals*













To Face *PLATE XIII.*

To proportion the ORDERS on a Pedestal to any given Height.

**T**HE Tuscan Order. Divide the given Height *a b* into five equal Parts, give one to the Pedestal; then divide the remaining Height *c d* also into five equal Parts, and give one to the Entablature; the remaining four Parts *e f*, which is the Shaft of the Column, including the Base and the Capital, divide into seven Parts; one of which is the Diameter of the Column, which is to be divided into six Parts, and one of these into ten Parts, called Minutes; which is a Scale to work by. For the Height and Projection of the Mouldings the Minutes are figured to each Order on the Plate.

Doric Order. Divide the Height *a b* into five equal Parts, give one to the Pedestal; then divide the remaining Height *c d* into five equal Parts also, and give one to the Entablature; the remaining Space *e f*, divided into eight equal Parts, gives the Diameter of the Column; divide as before for the Minutes.

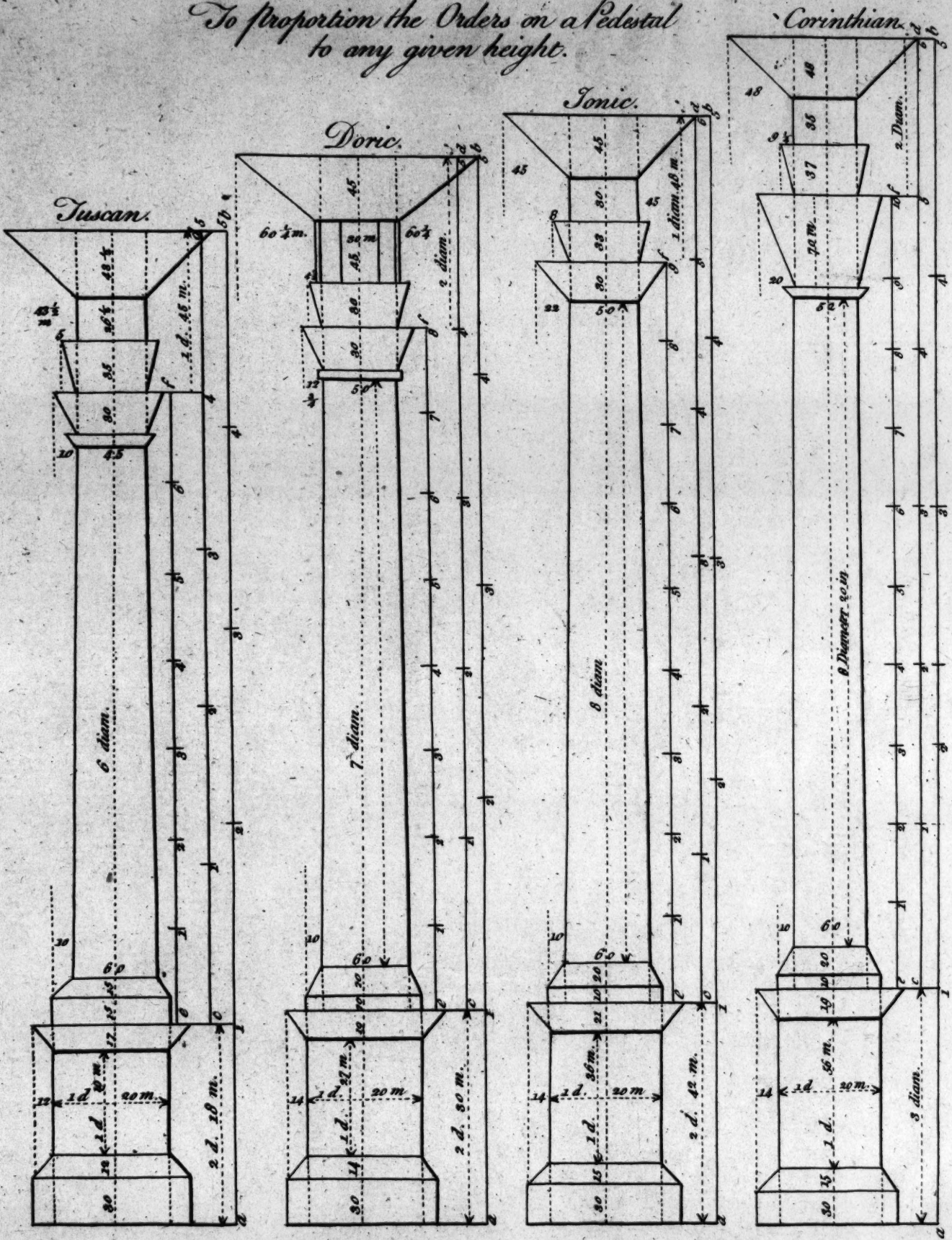
Ionic Order. Having divided *a b* as before, and given one fifth Part for a Pedestal; divide *c d* what remains into six Parts, one is for the Entablature, equal to one Diameter and forty-eight Minutes; then divide *e f* into nine Parts, one of which is the Diameter of the Column. The Minutes may be found as in the Tuscan Order.

Corinthian Order. Of five equal Parts in *a b* give one to the Pedestal; divide *c d* into six equal Parts, one is for the Entablature, equal to two Diameters; then divide the remaining Height *e f* into ten Parts; one is the Diameter of the Column. The Minutes to be found as in the Tuscan Order.

The Composite Order is made after the same Proportions as the Corinthian.



To proportion the Orders on a Pedestal  
to any given height.













To Face *PLATE* XIV.

To proportion the *ORDERS* on a Sub-plinth.

When the *Orders* are executed without Pedestals, the following Proportions may be observed.

**T**HE Tuscan Order. Divide the given Height into ten equal Parts, one of which is the Diameter of the Column; give one to the Sub-plinth, and one Diameter and three Quarters or forty-five Minutes to the Entablature. The Minutes to be found as before directed in the Tuscan Order, Plate XIII.

The Doric Order. Divide the Height into eleven Parts; one is the Diameter of the Column. To the Sub-plinth give one Diameter, and to the Entablature two Diameters.

The Ionic Order. Divide the Height into twelve Parts; one is the Diameter of the Column; give one to the Sub-plinth, and one Diameter and forty-eight Minutes to the Entablature.

The Corinthian Order. Divide the Height into thirteen Parts; one is the Diameter of the Column, the same for the Sub-plinth. The Entablature requires two Diameters.

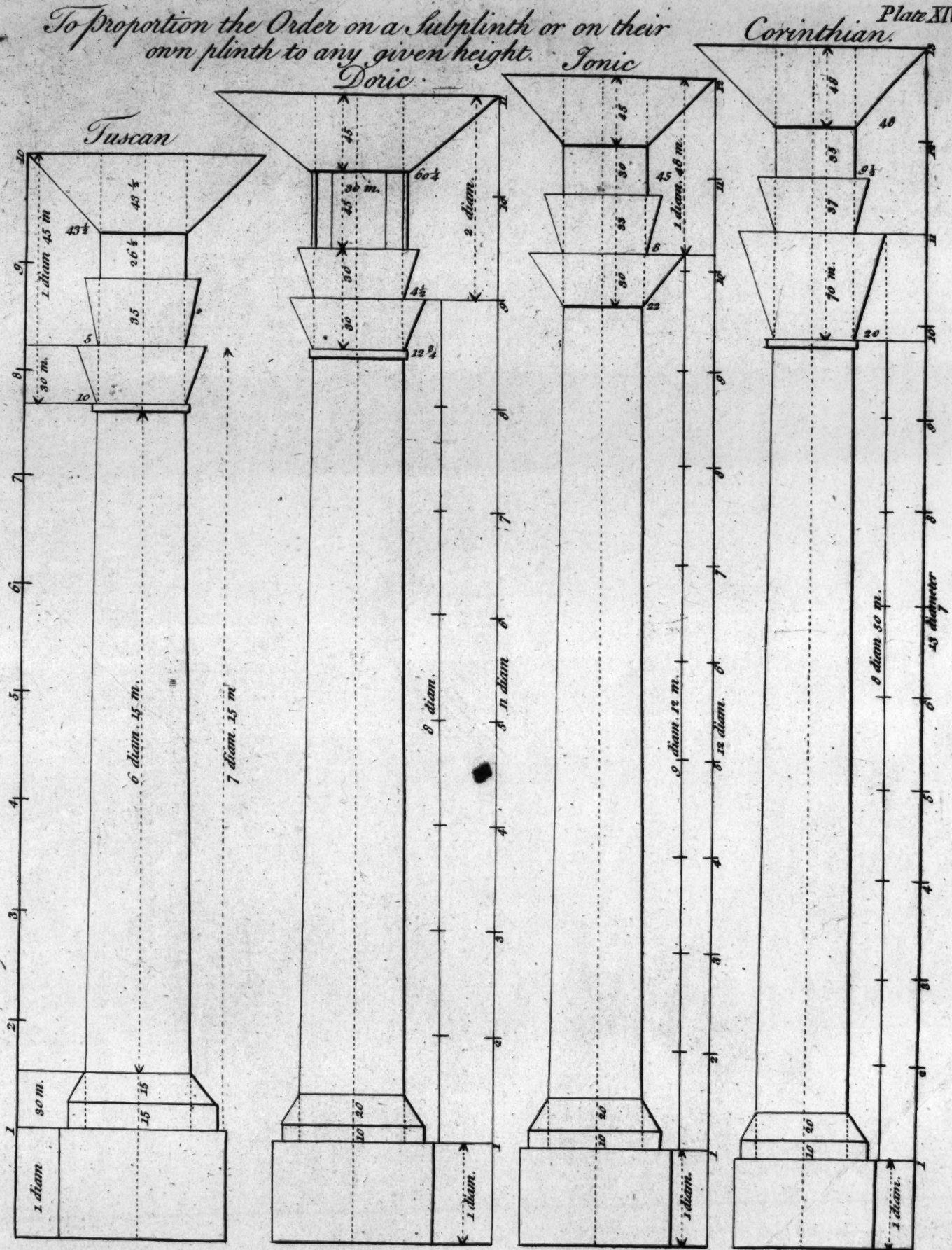
For the Composite Order the same Proportions will do as in the Corinthian.

H



To proportion the Order on a Subplinth or on their own plinth to any given height.

Plate XIV.

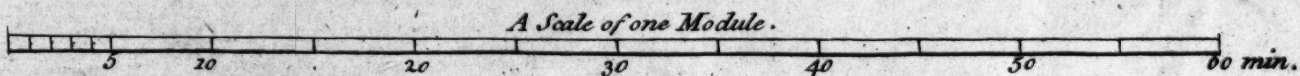
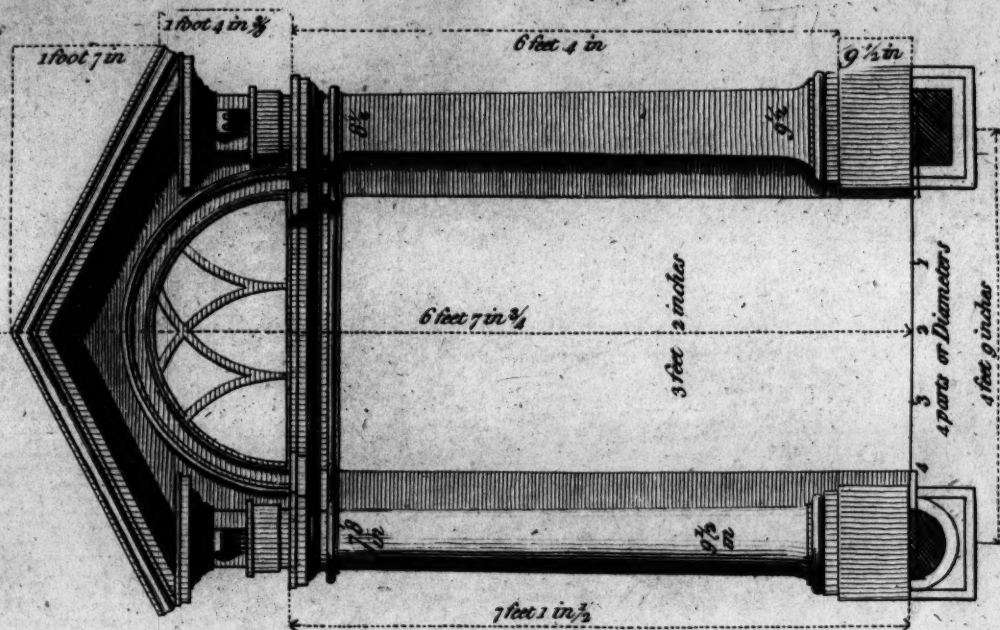






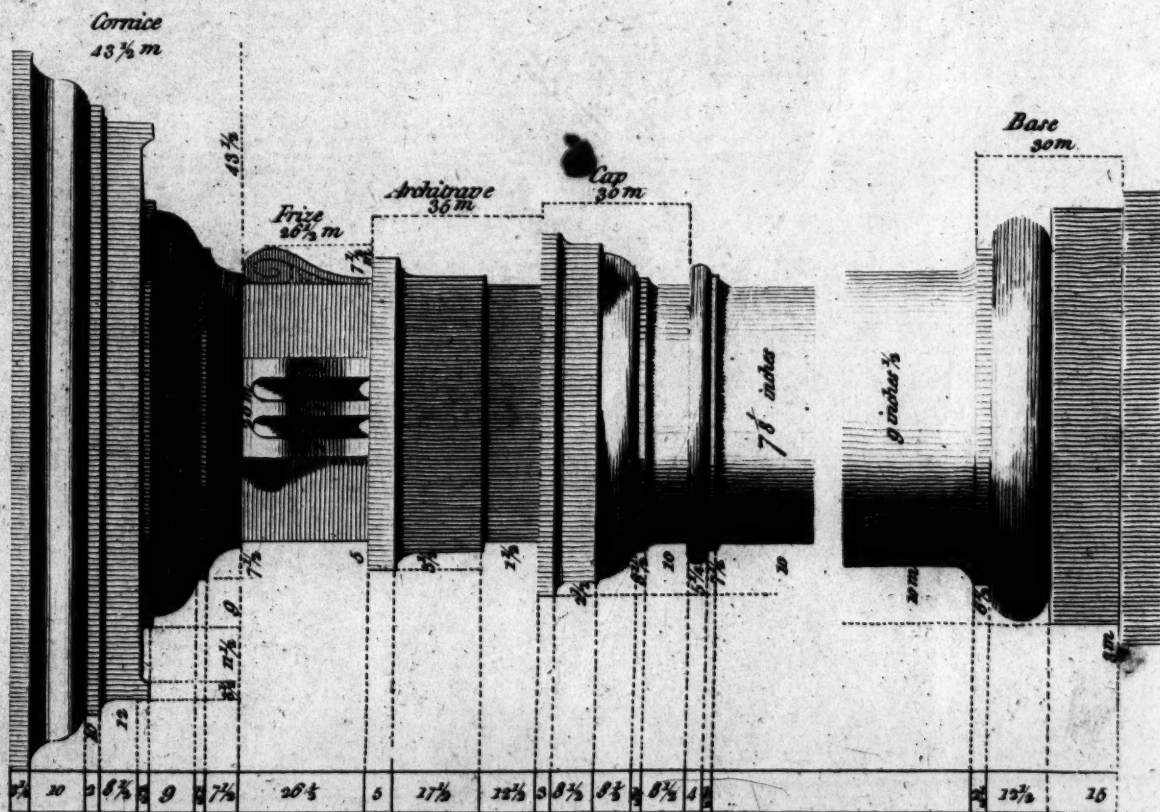


Frontispice in the Tuscan Order.



Divide the given Module into 12 parts and one of those parts into 5, gives the Minutes.

The Tuscan Entablature.



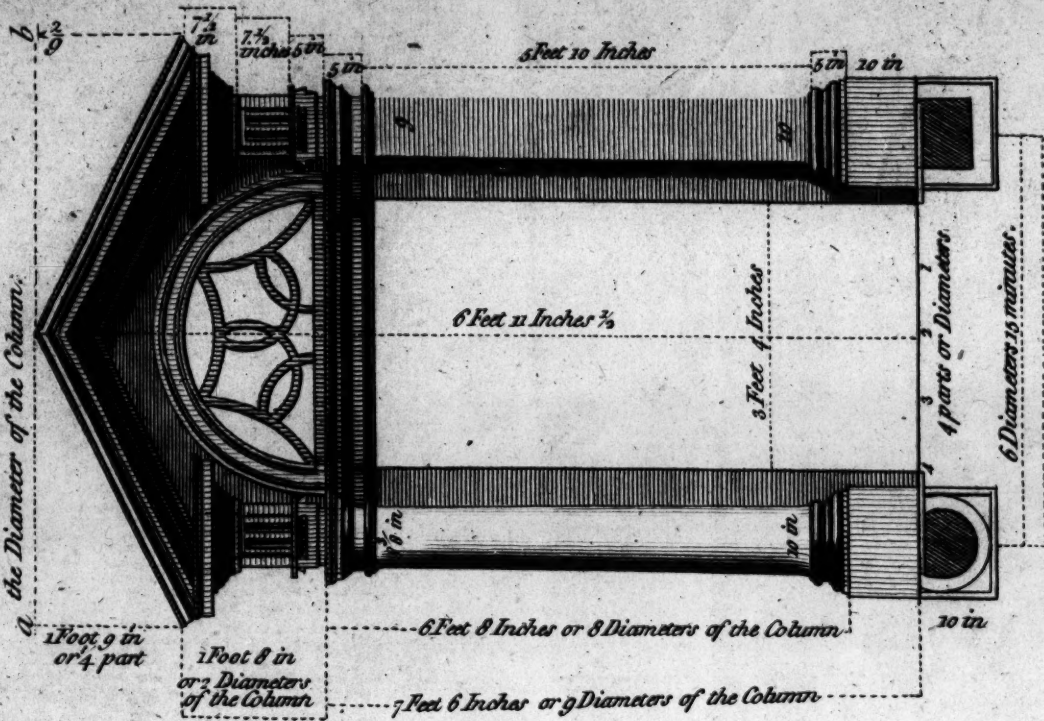




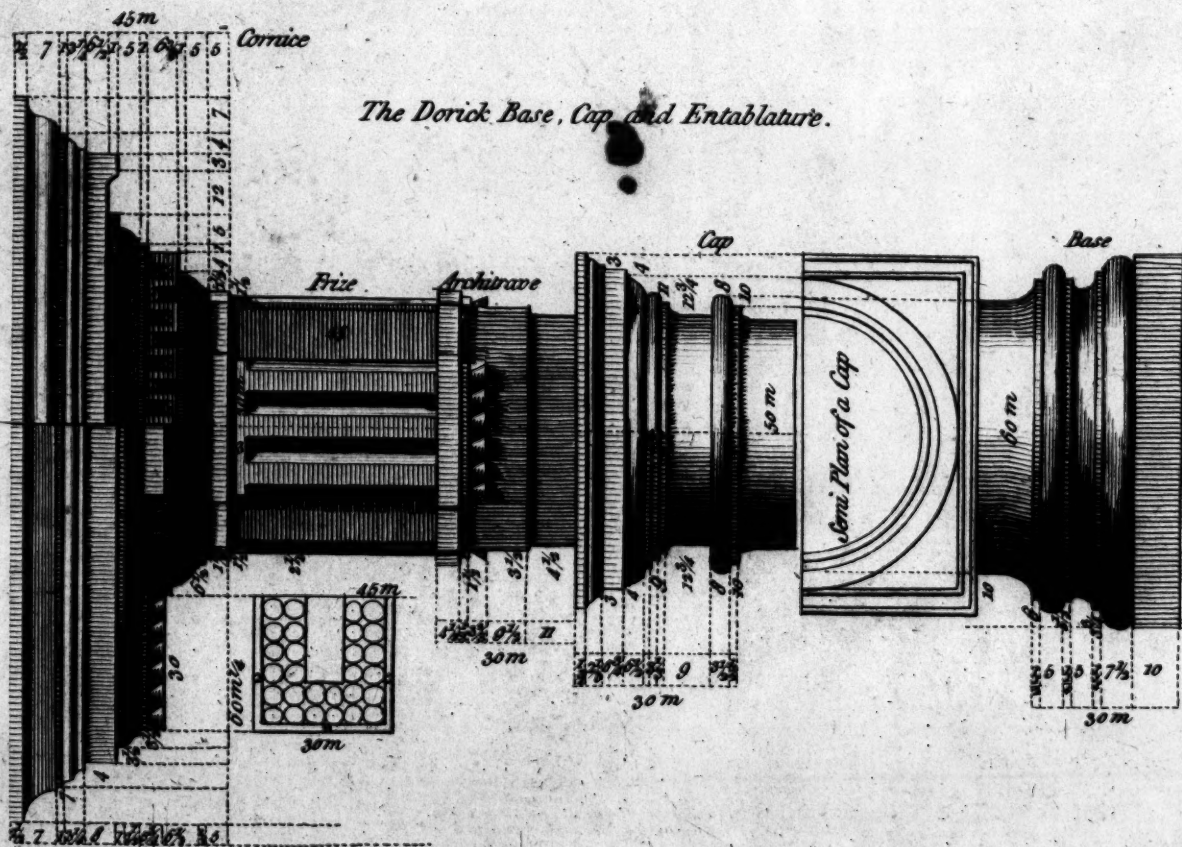


Frontispice in the Dorick Order

Divide the Width of the Door into 4 parts one is the Diameter of the Column.



The height or pitch of Pediments is  $\frac{1}{4}$  of the width from a to b or 5 Feet 2 Inches  $\frac{1}{2}$  6 Diameters is modulus.

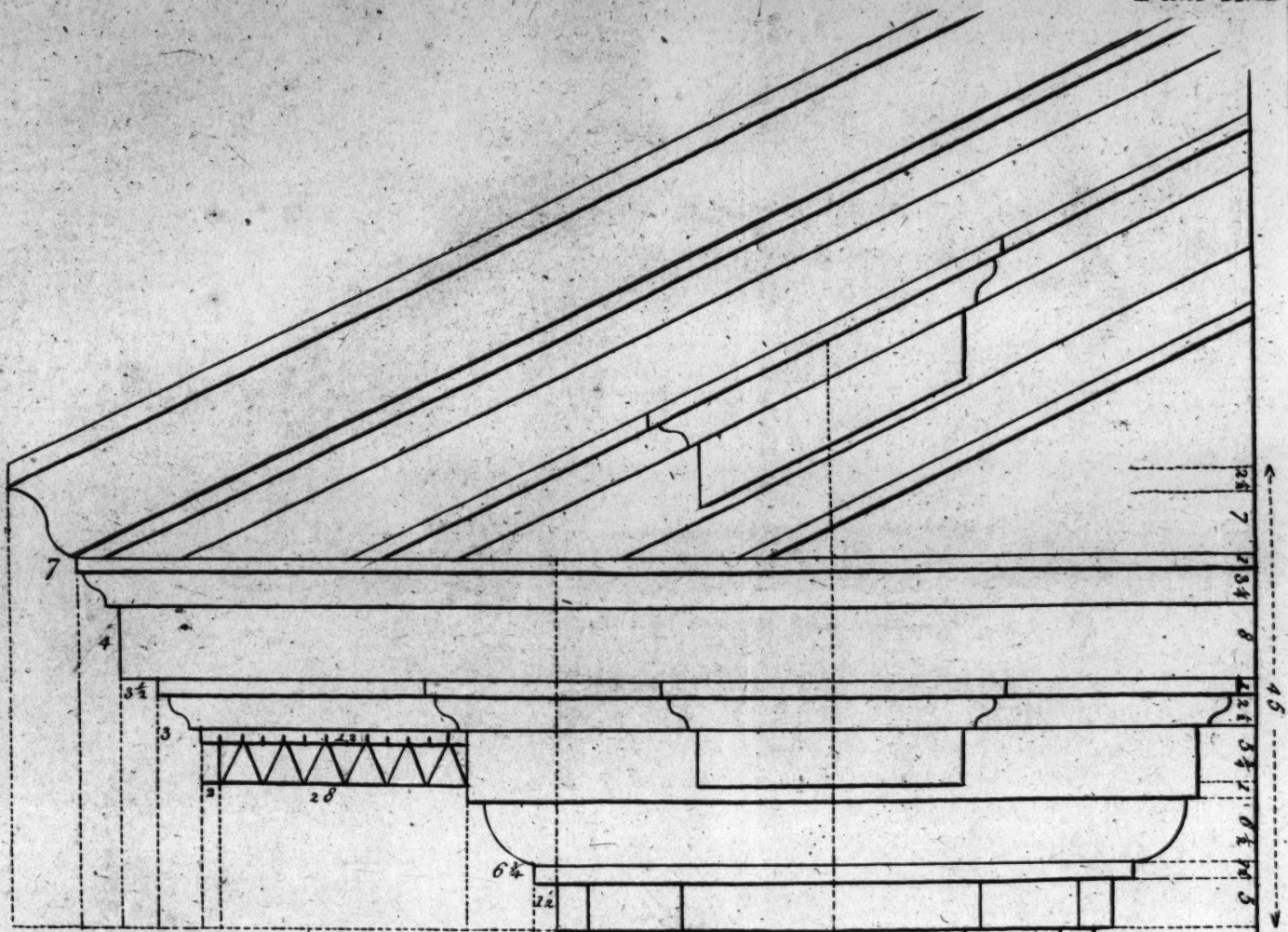


The Dorick Base, Cap and Entablature.

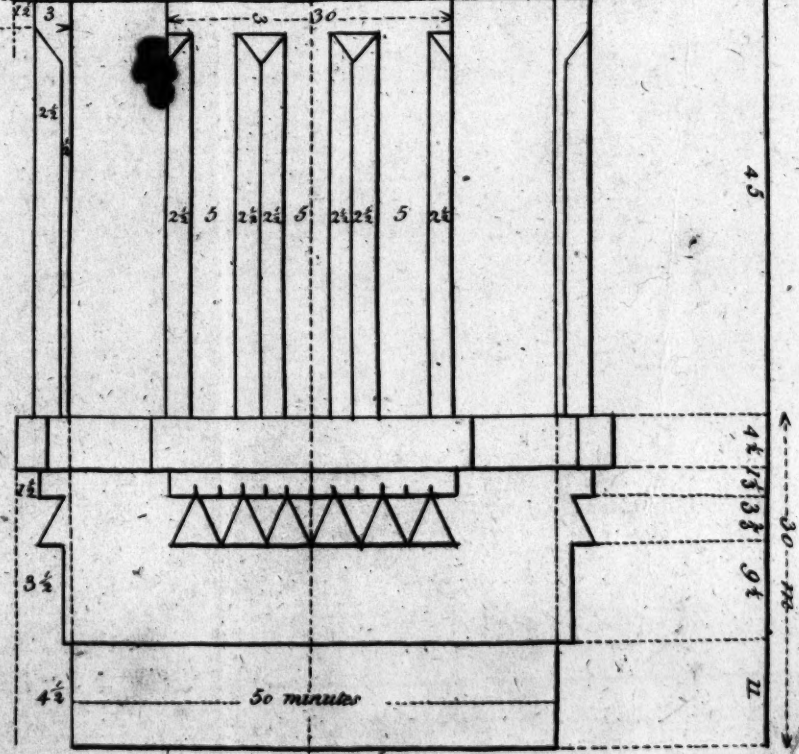
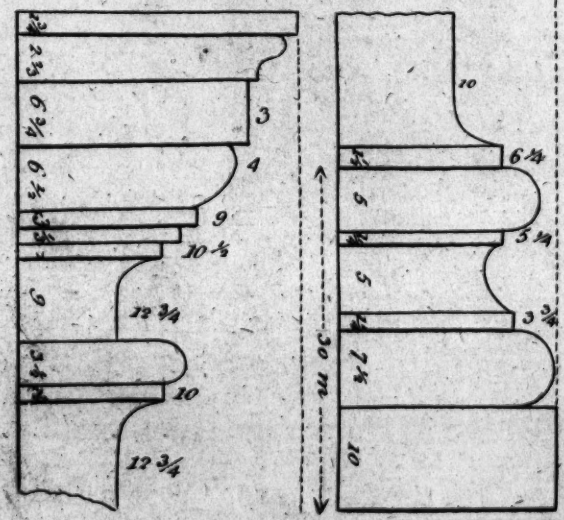








*The Doric Entablature  
& part of the Pediment  
at Large.*

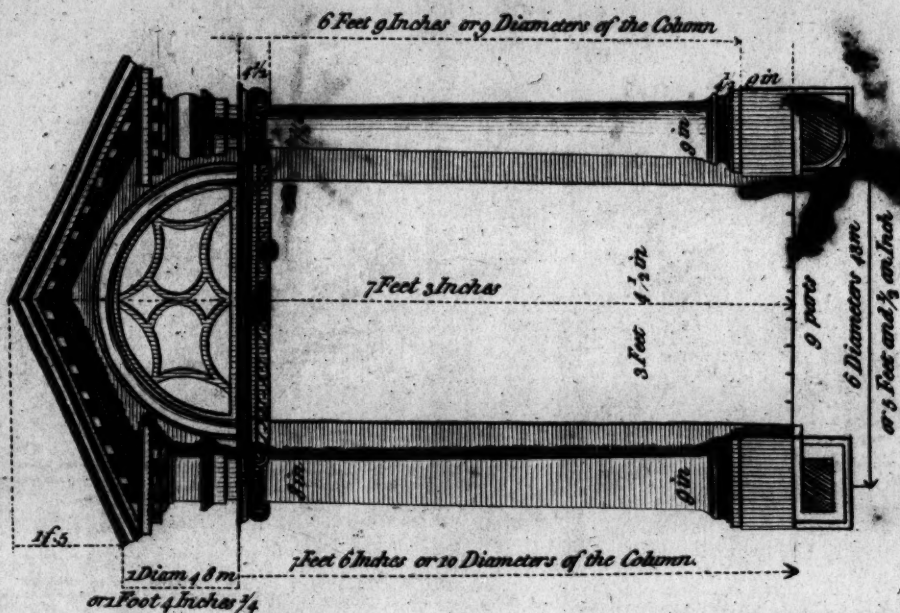




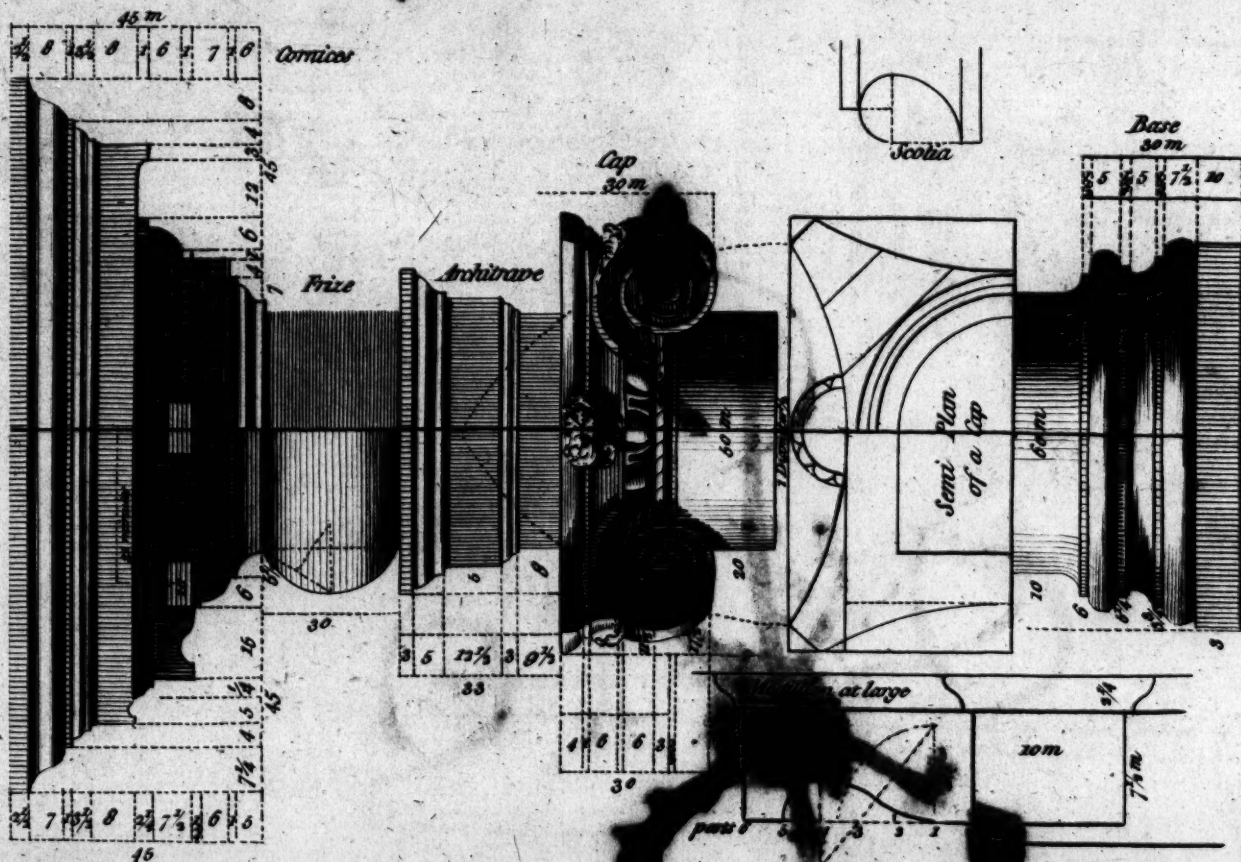




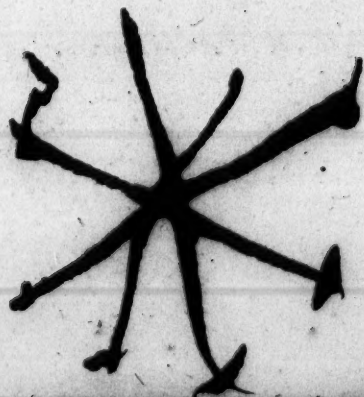
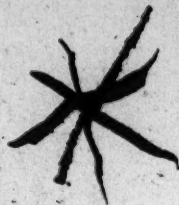
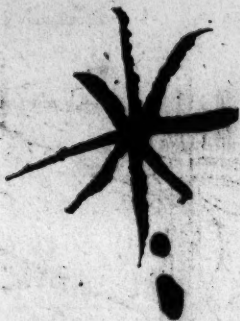
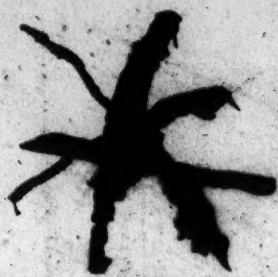
Frontispiece in the Ionick Order.  
 13 Modillions between the Central Lines of the Columns 31 inches from Center to Center of the Modillions.  
 Divide the Width of the Door into 9 parts, each part is equal to half the Columns Diameter or 4 inches  $\frac{1}{2}$ .



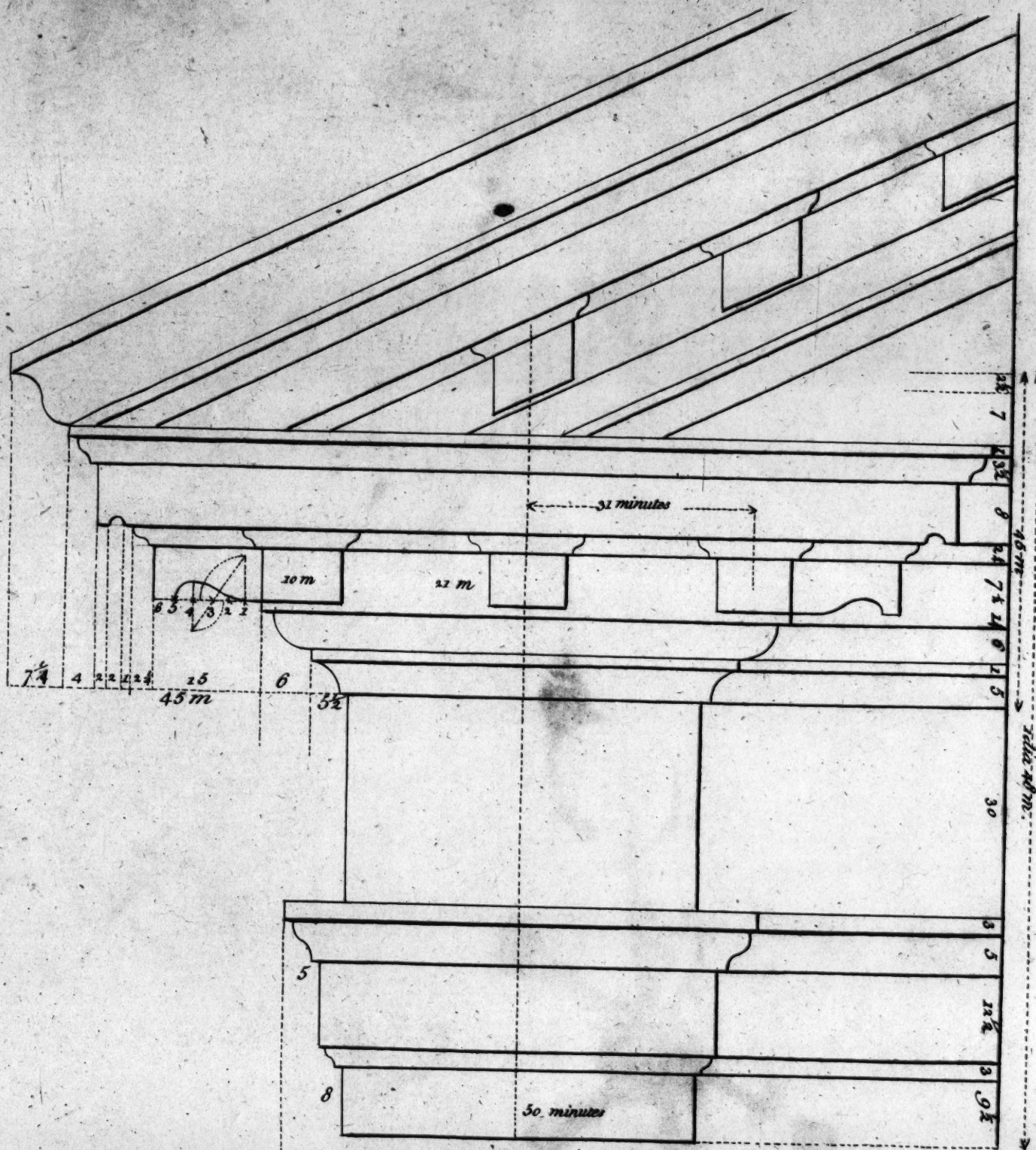
*Ionick Entablature.*











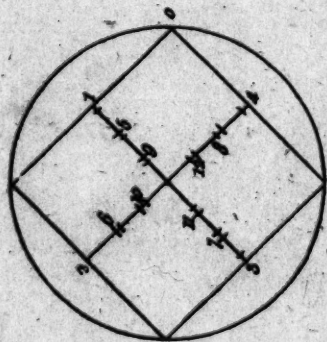
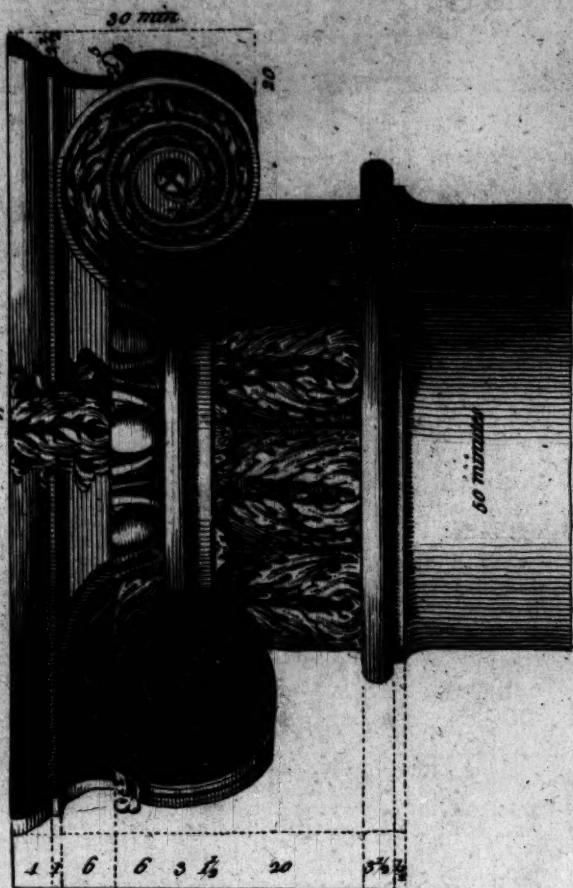
*The Ionic Entablature with part of the Pediment at Large.*



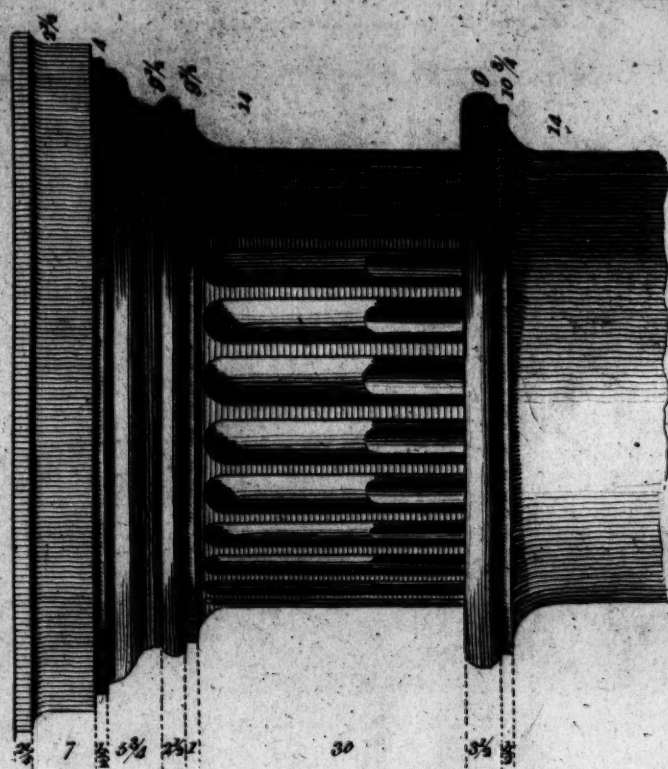
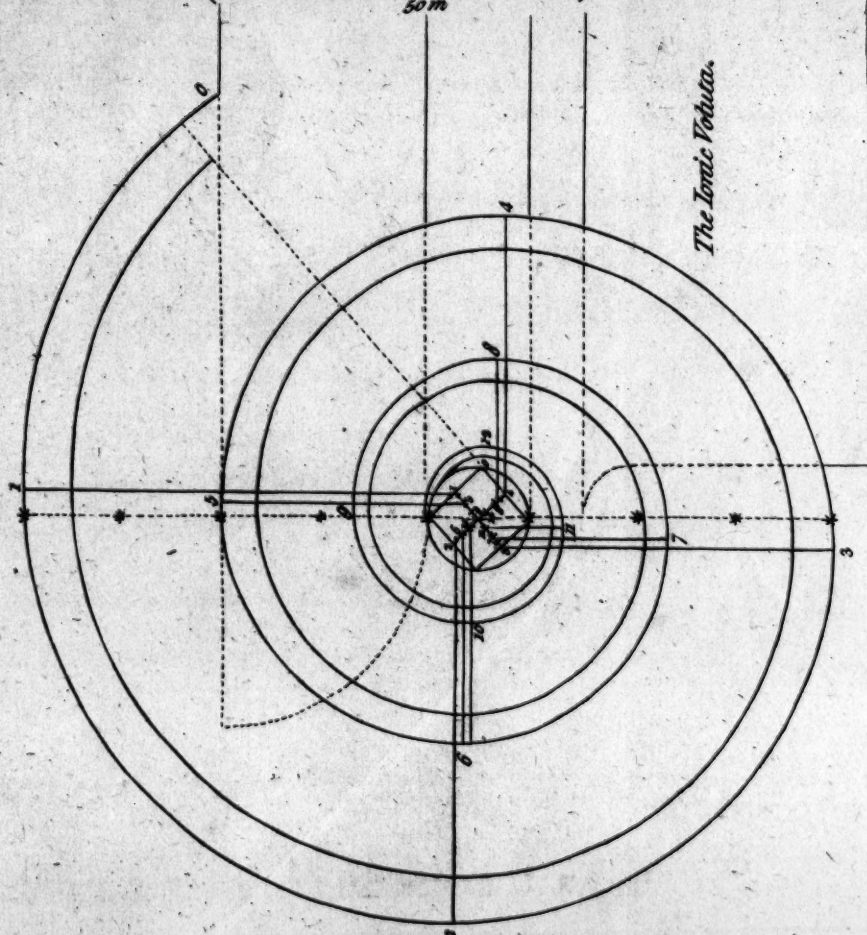




*A Modern Ionic Capital, with Leaves*



*The Eye of the Volute at large.*

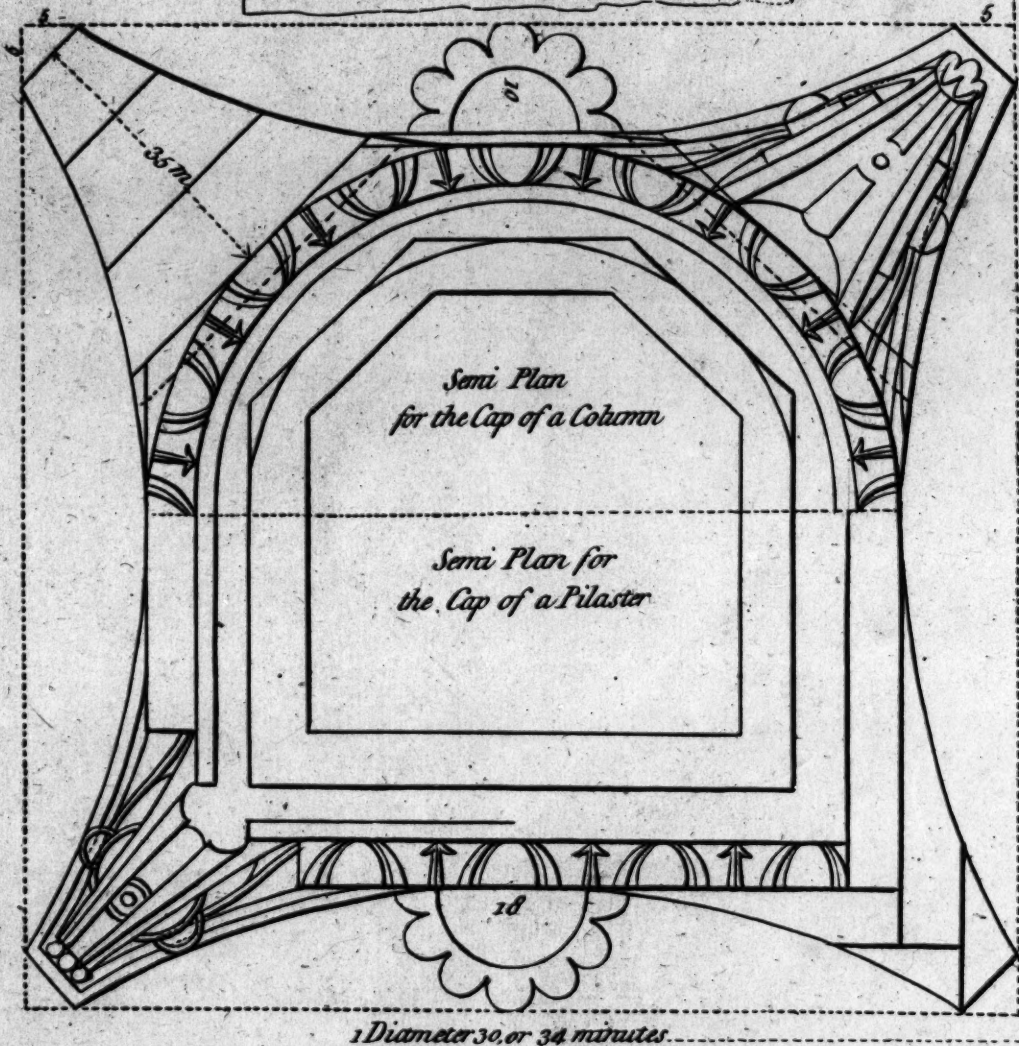


*A Composed Cap for a Column.*

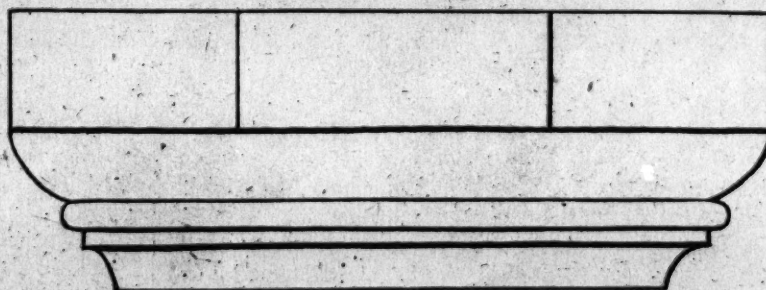








*The Body of the Cap with  
the Mouldings worked  
before the Horns are  
Glued on.*

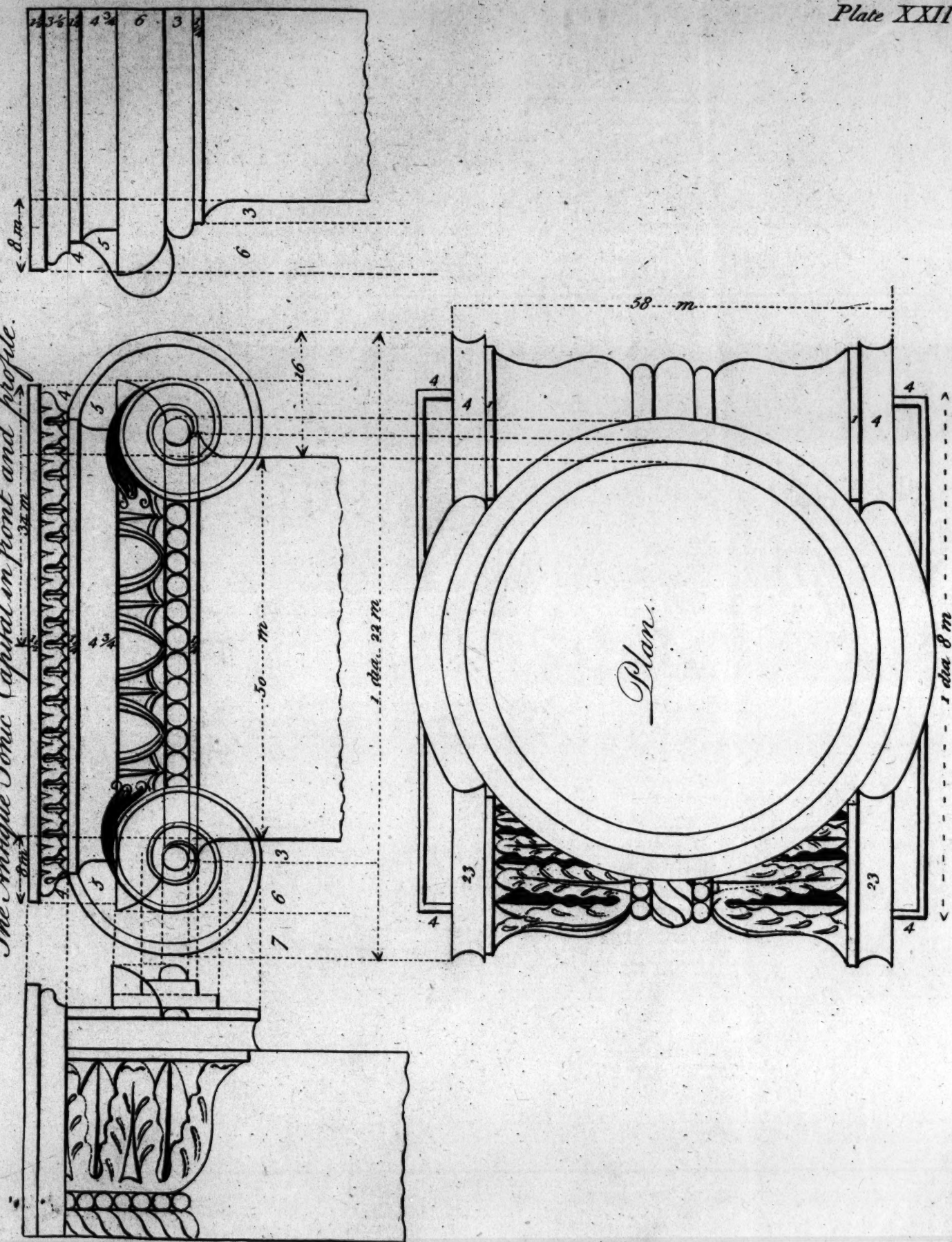








The Antique Ionic Capital in front and profile.





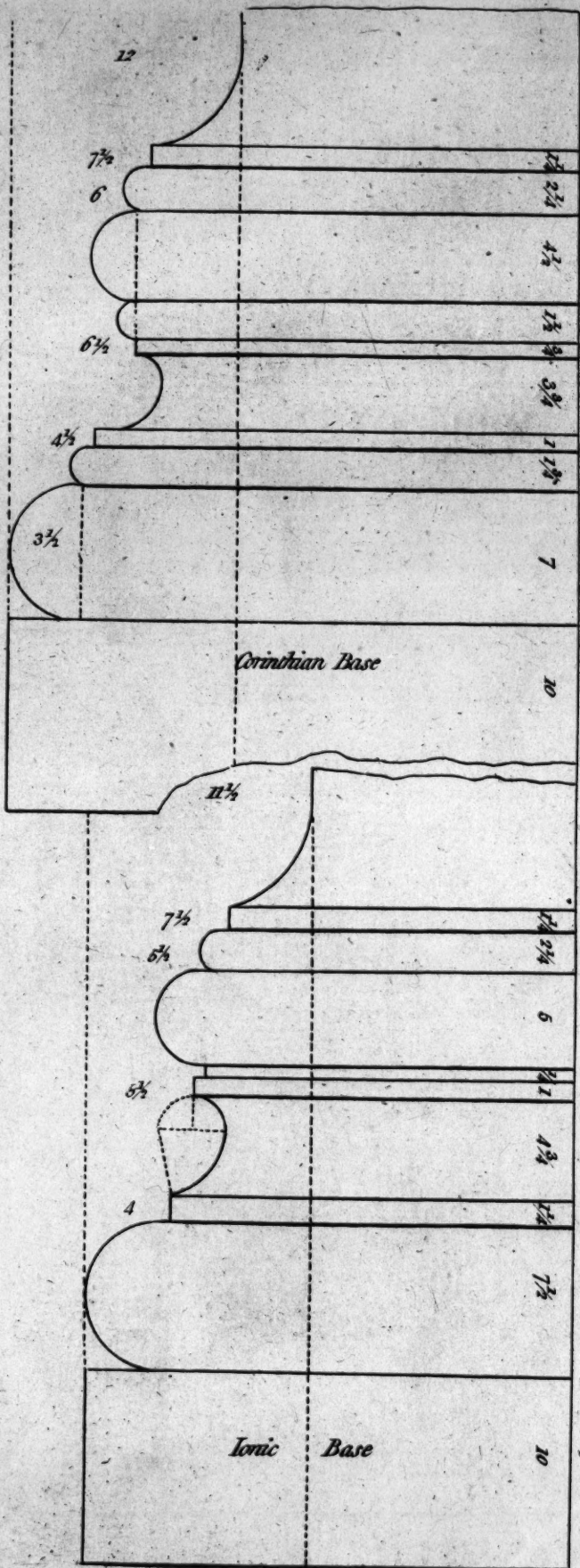
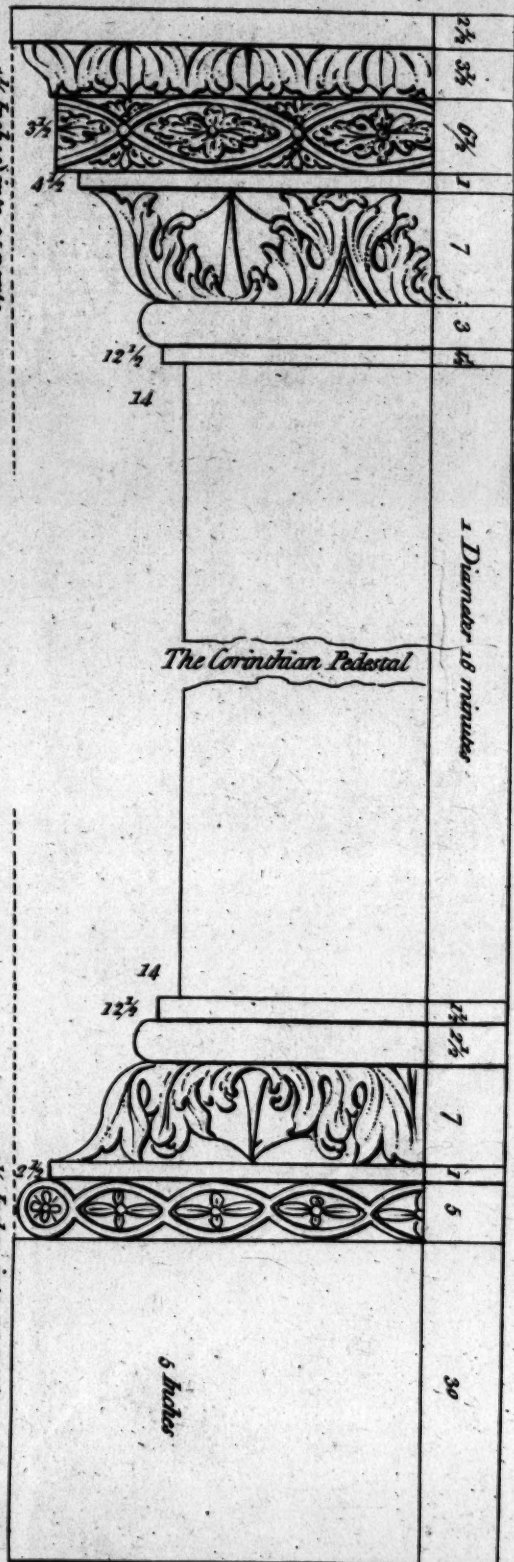




25 parts

Base and Subbase for Rooms

17 parts

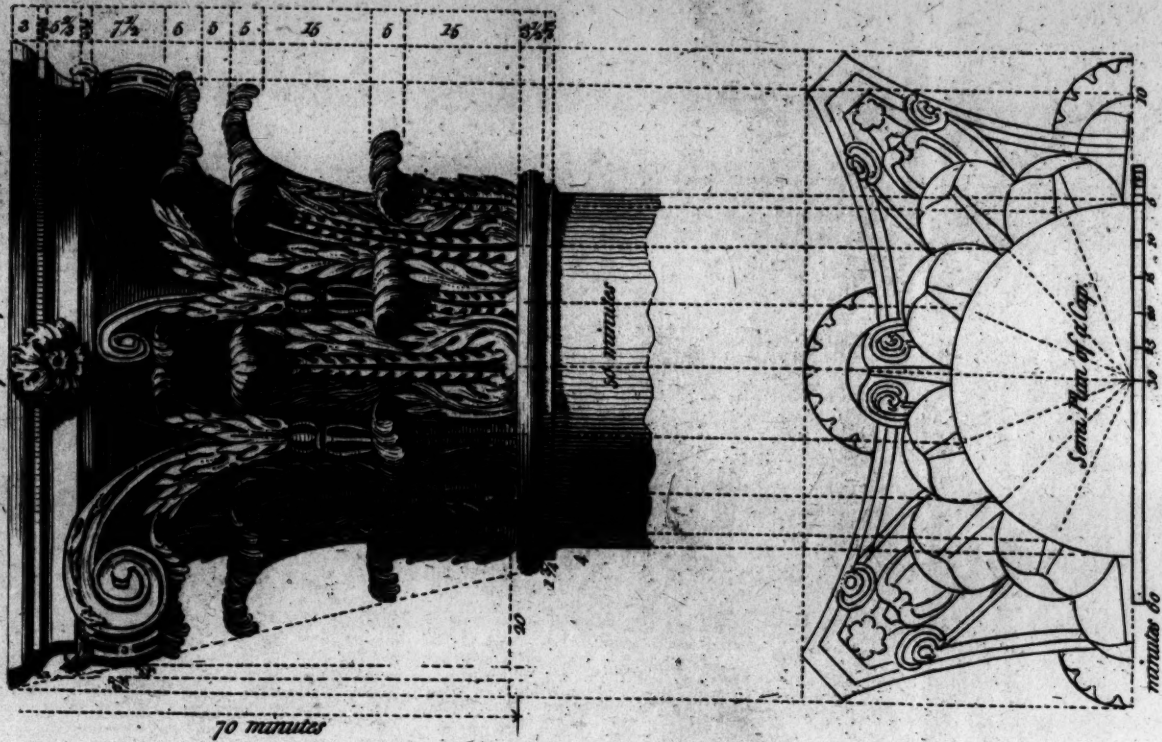




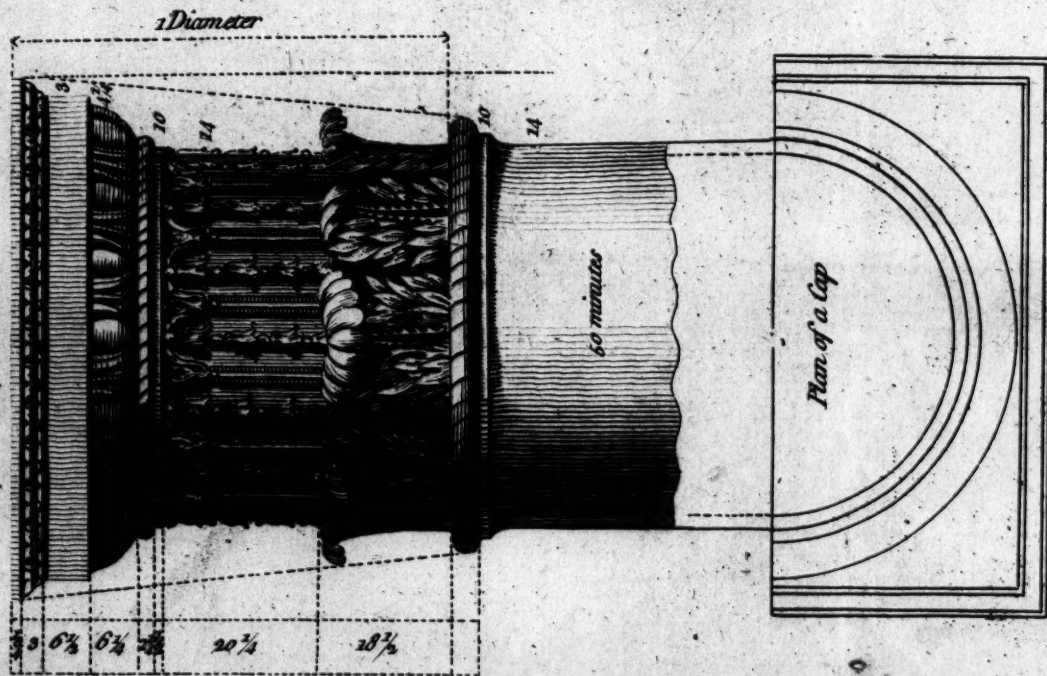




*Corinthian Capital for a Column.*



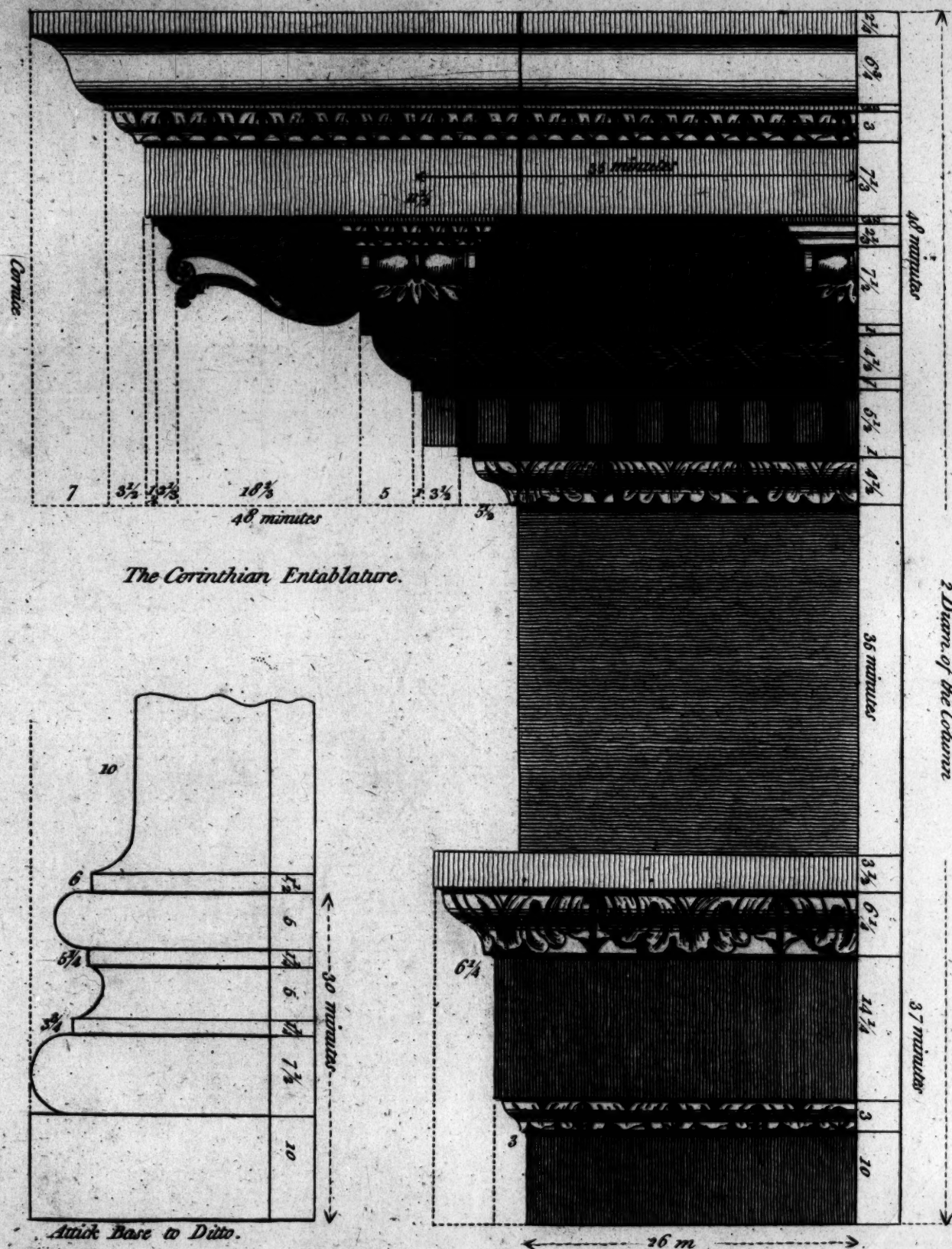
*A Modern  
Composed Capital for a Column.*

















1890



To Face *P L A T E* XXVI.

The Manner of Gluing up the CORINTHIAN CAPITAL.

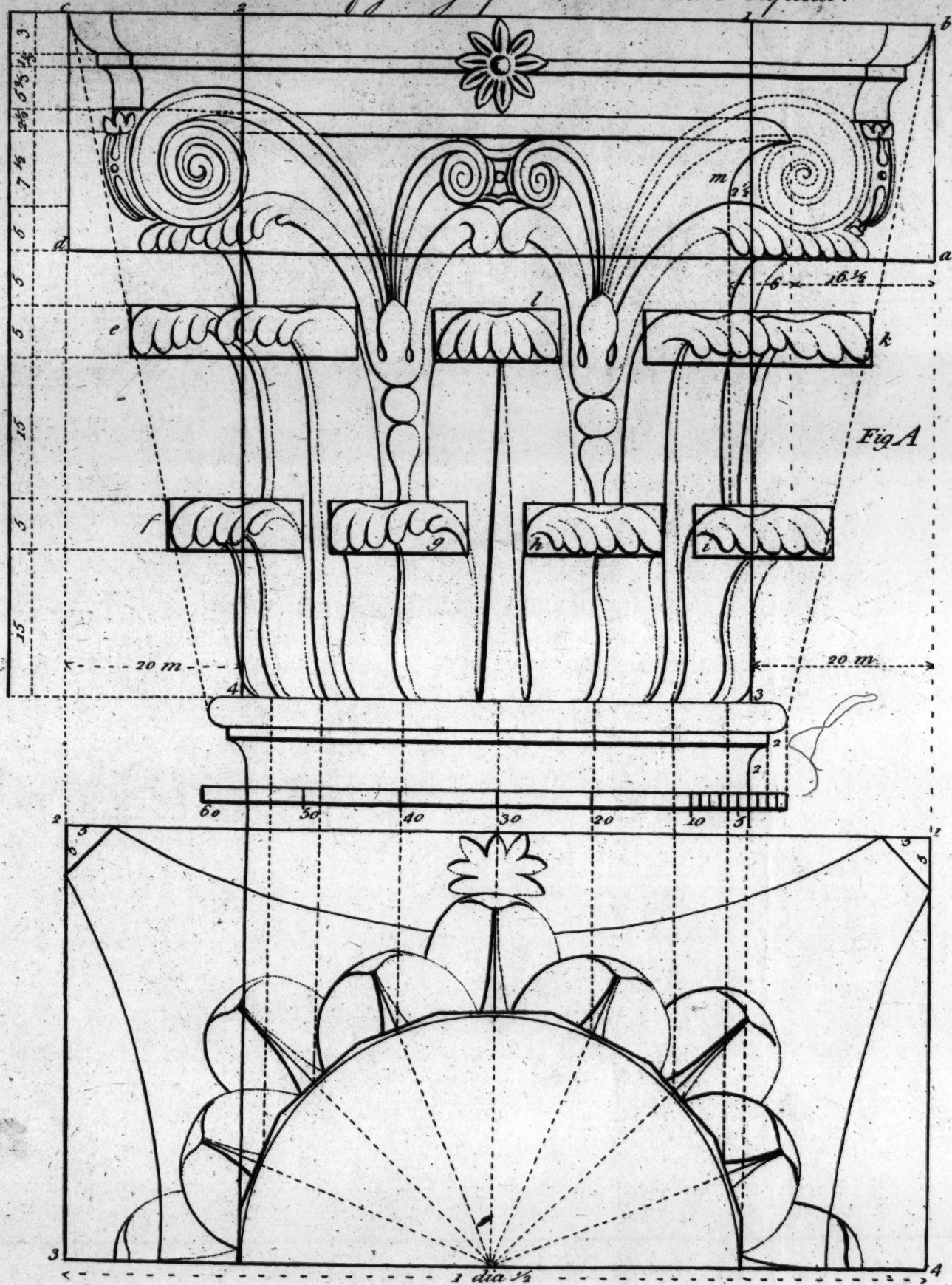
**D**RAW half the Plan 1, 2, 3, 4, then draw the Elevation of the Cap Fig. A, wherein the Body of the Cap is glued up, as 1, 2, 3, 4, in Cants upright, with the Grain the same as the Shaft of the Column, and the upper Part is a Solid, as represented by *a, b, c, d*, which contains the Abacus and Volutes; the Tops of the two Tier of Leaves are glued on separate, as *e, f, g, h, j, k, l*, which is plain to Inspection.

*Note*, The upper Part *a, b, c, d*, to be square, as on the Plan 1, 2, 3, 4, this shews one half of the Cap, which is sufficient to explain the whole.

The Bell of the Cap is sunk two Minutes and an Half lower than the Surface of the Body, and the whole Projection of the Bell six Minutes, as figured.



The manner of gluing up the Corinthian Capital. Plate XXVI.

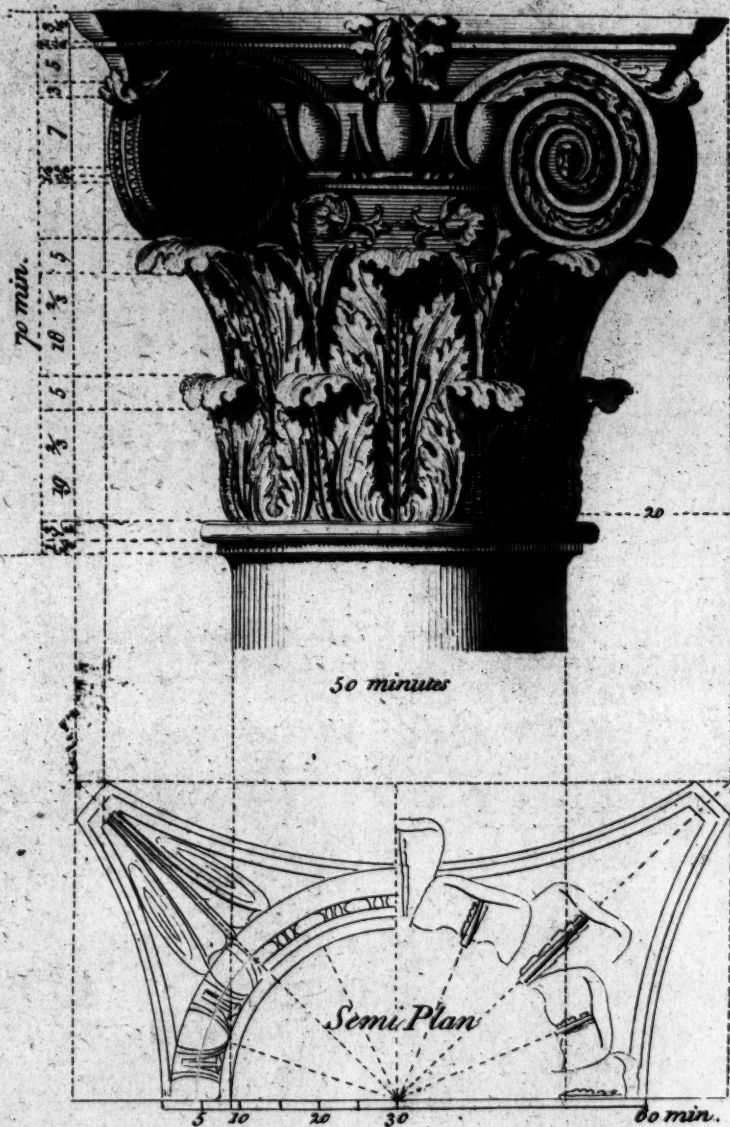








*The Antient Composite or Roman Capital*



*The Proportions of Composite Entablature are the same as the Corinthian.*

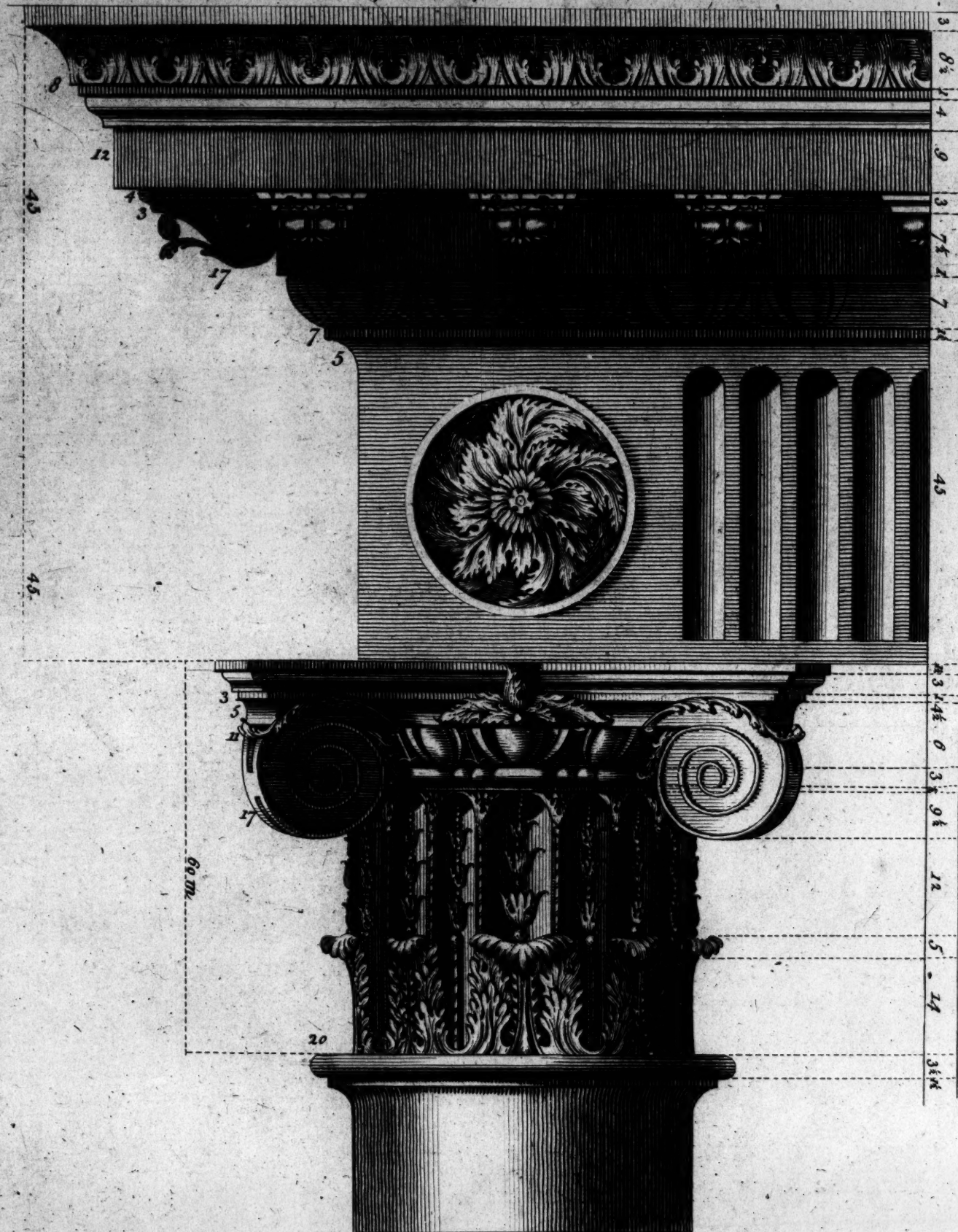






*A Modern Composite Capital and Entablature;*

*Plate XXVIII*



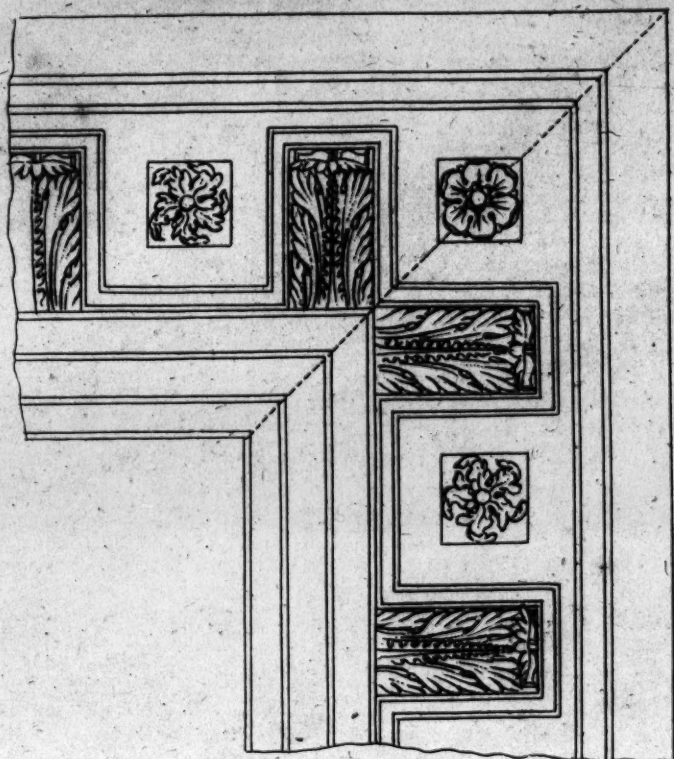
*may be used with the Attic Base.*



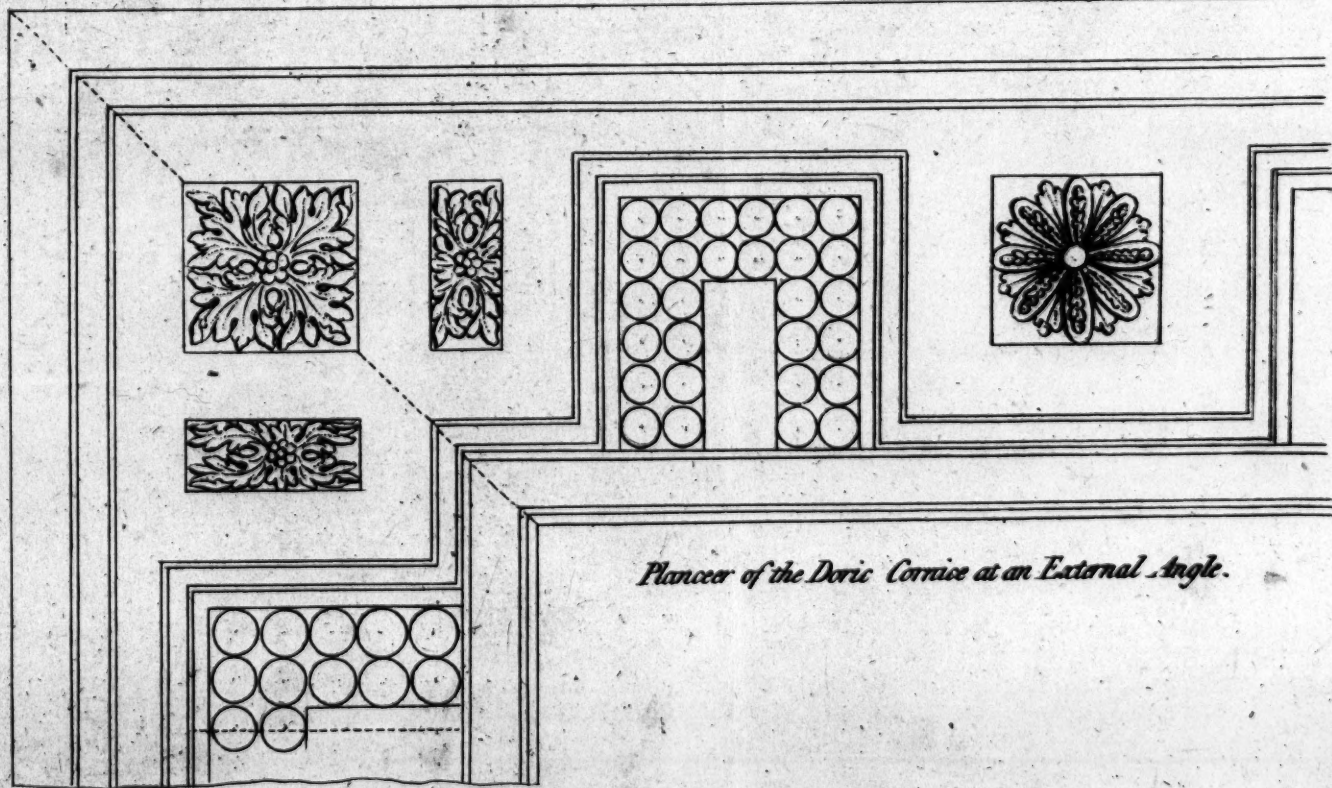
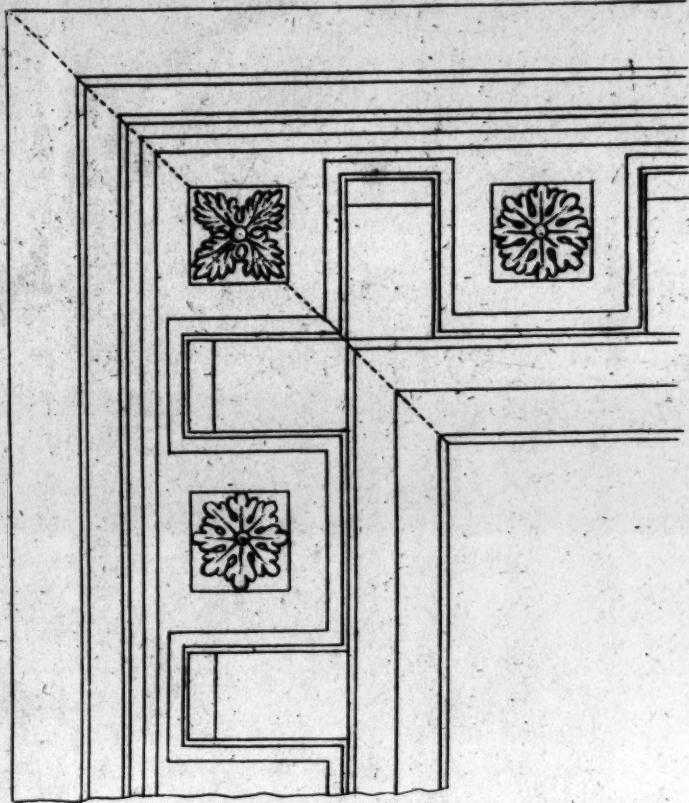




*Planceer of the Corinthian Cornice at an External Angle.*



*Planceer of the Ionic Cornice at an External Angle.*



*Planceer of the Doric Cornice at an External Angle.*







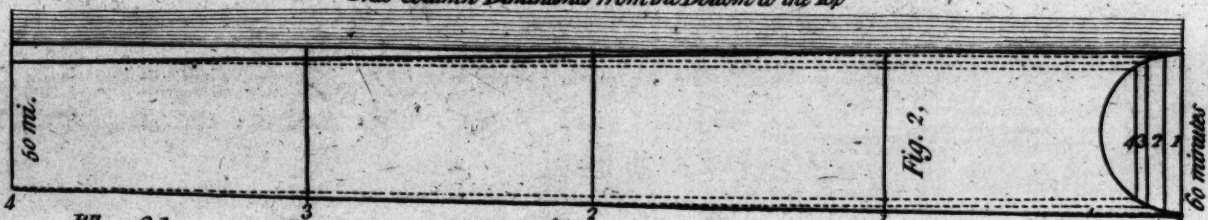
# Glueing of Columns.

*This Column Diminishes from one third of the Height.*



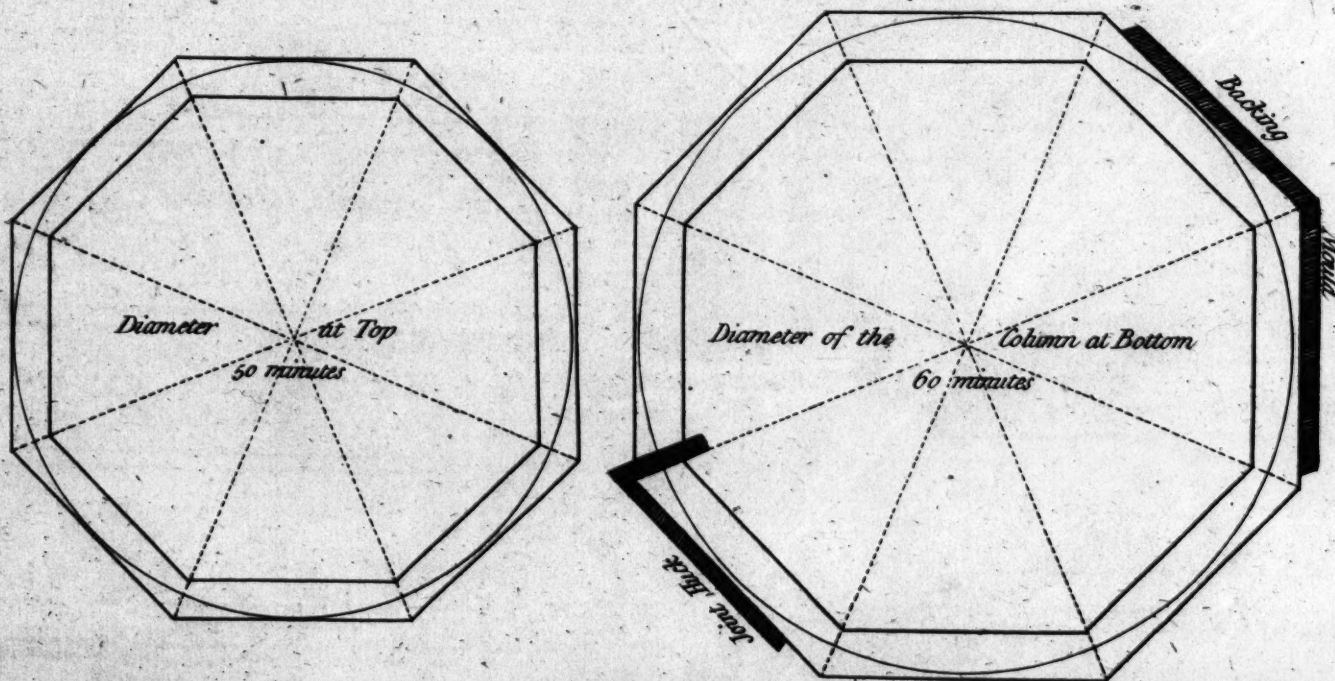
*The manner of Glueing up Columns & Diminishing them*

*This Column Diminishes from the Bottom to the Top*



*When Columns are fluted divide the Round or Circumference into 96 parts give three to a Flute and one to a Fillet.*

*Diminish the Staves of the Columns on the Faces before they are Glued together, this is a very safe and sure way for making the Column.*



*When Pilasters are Fluted divide the Breadth or Diameter into 29 parts give one to a Fillet and three to a Flute.*

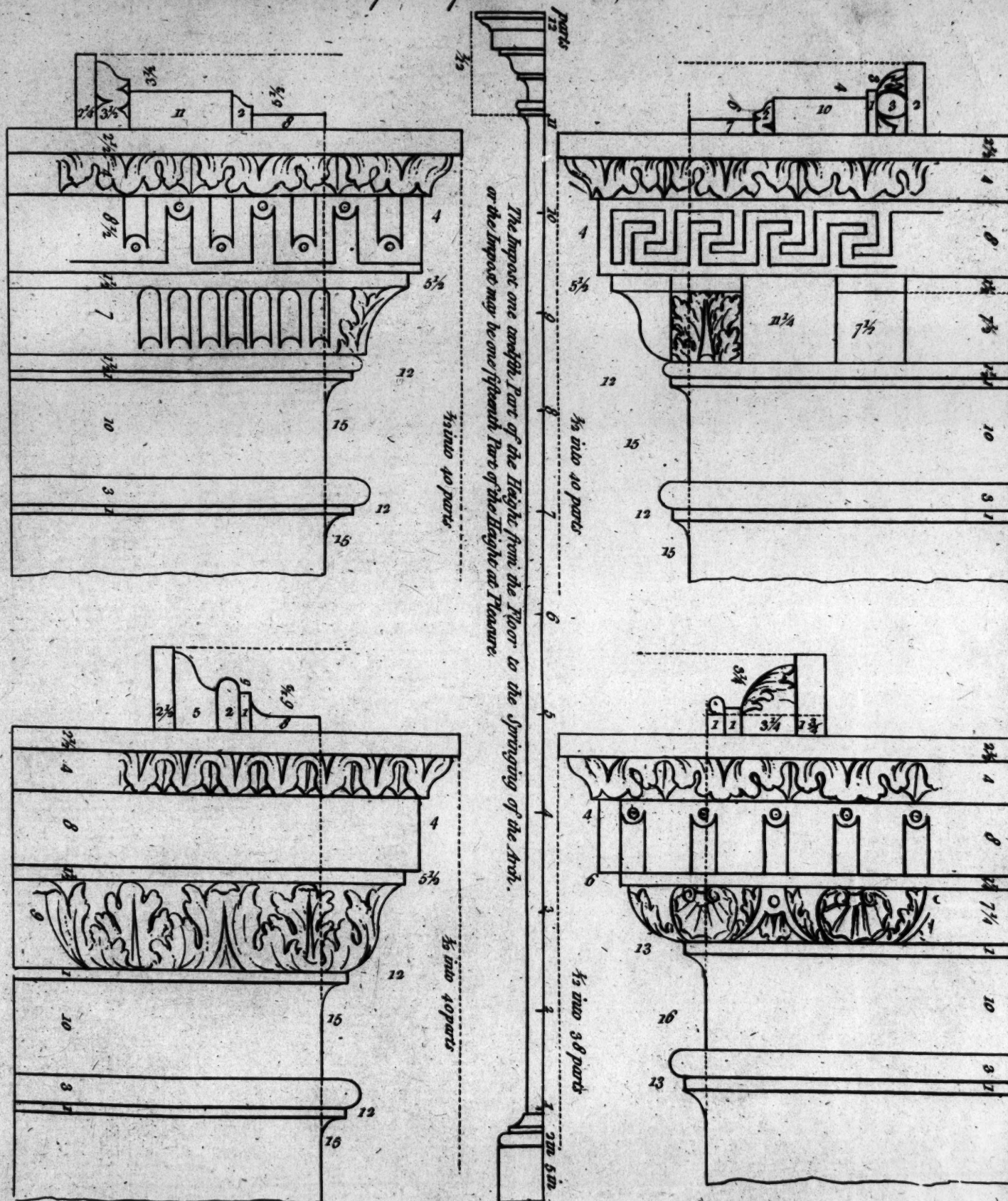






*Imposts for Arches &c.*

*Plate XXXI.*

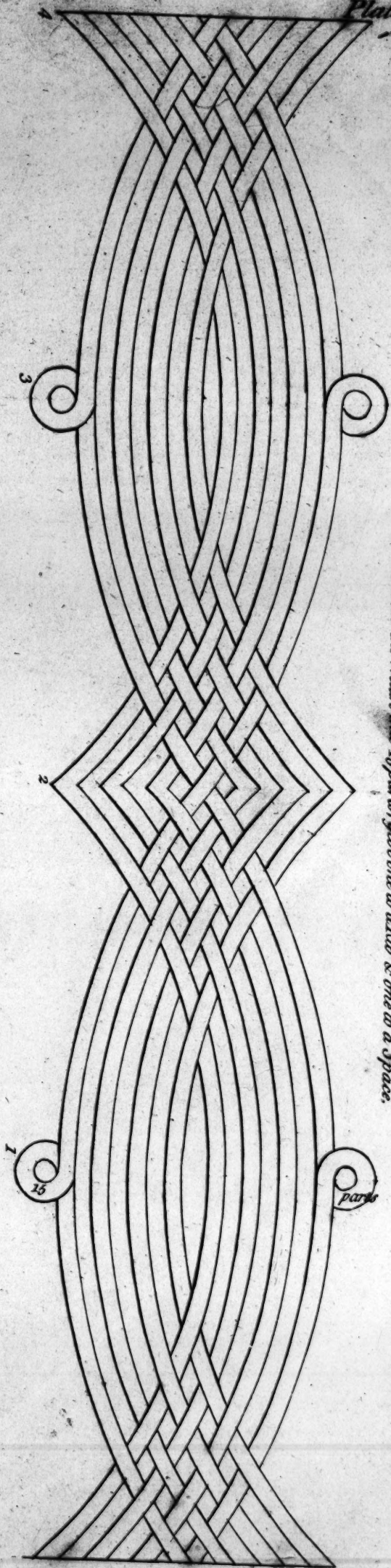
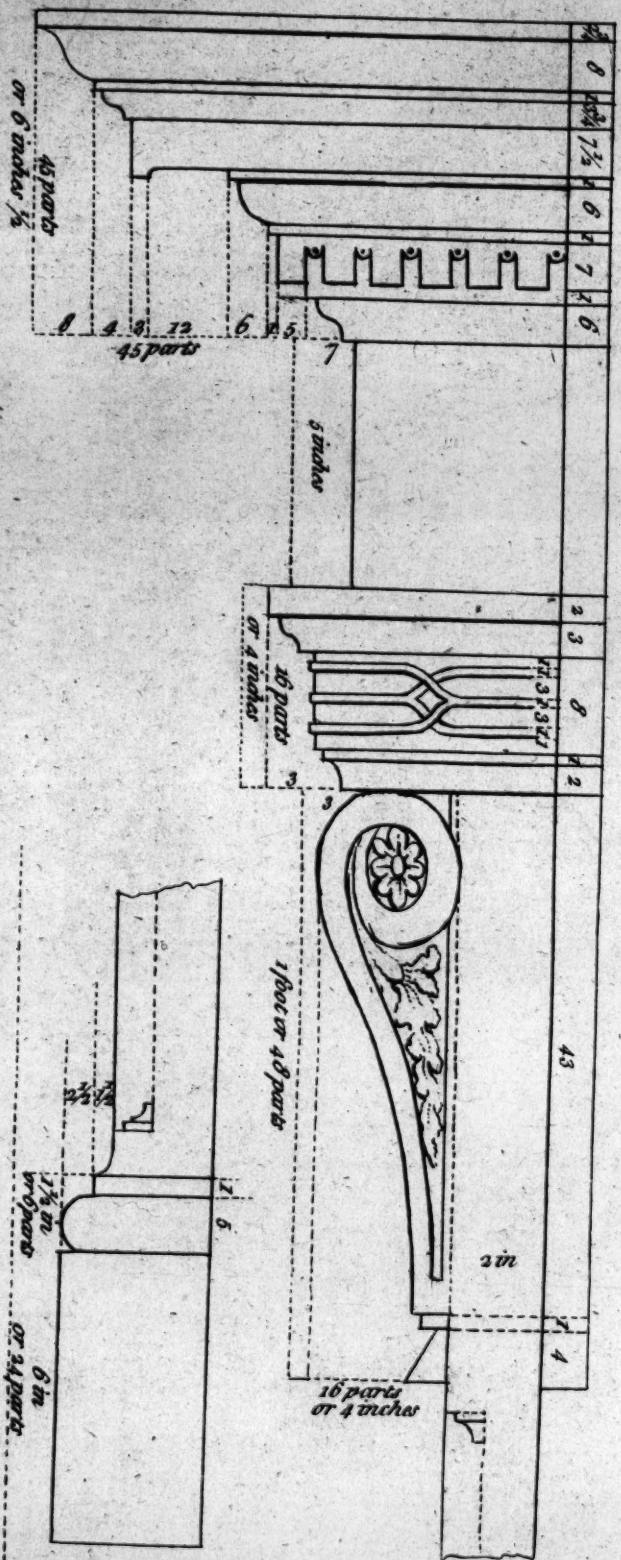








Entablature for Doors Windows &c.  
with all the Measures figured for Practice at large.



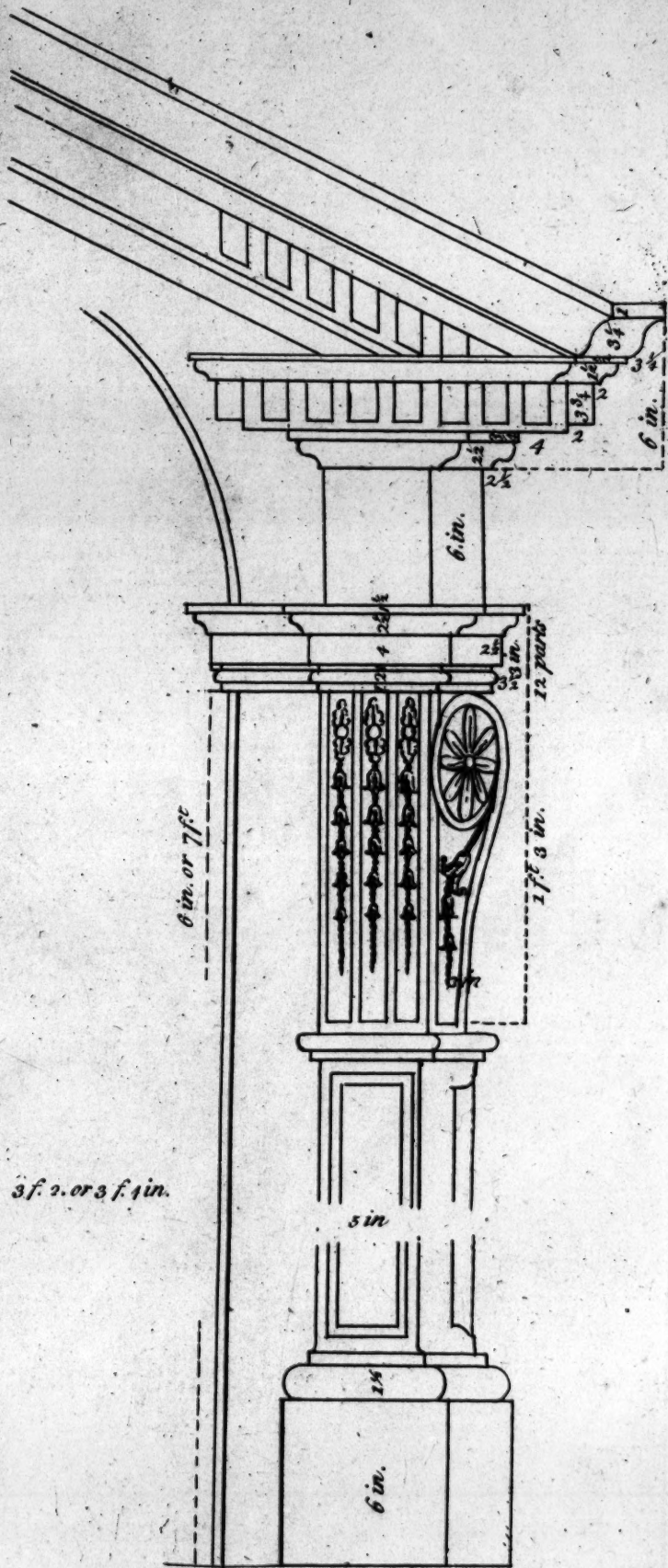
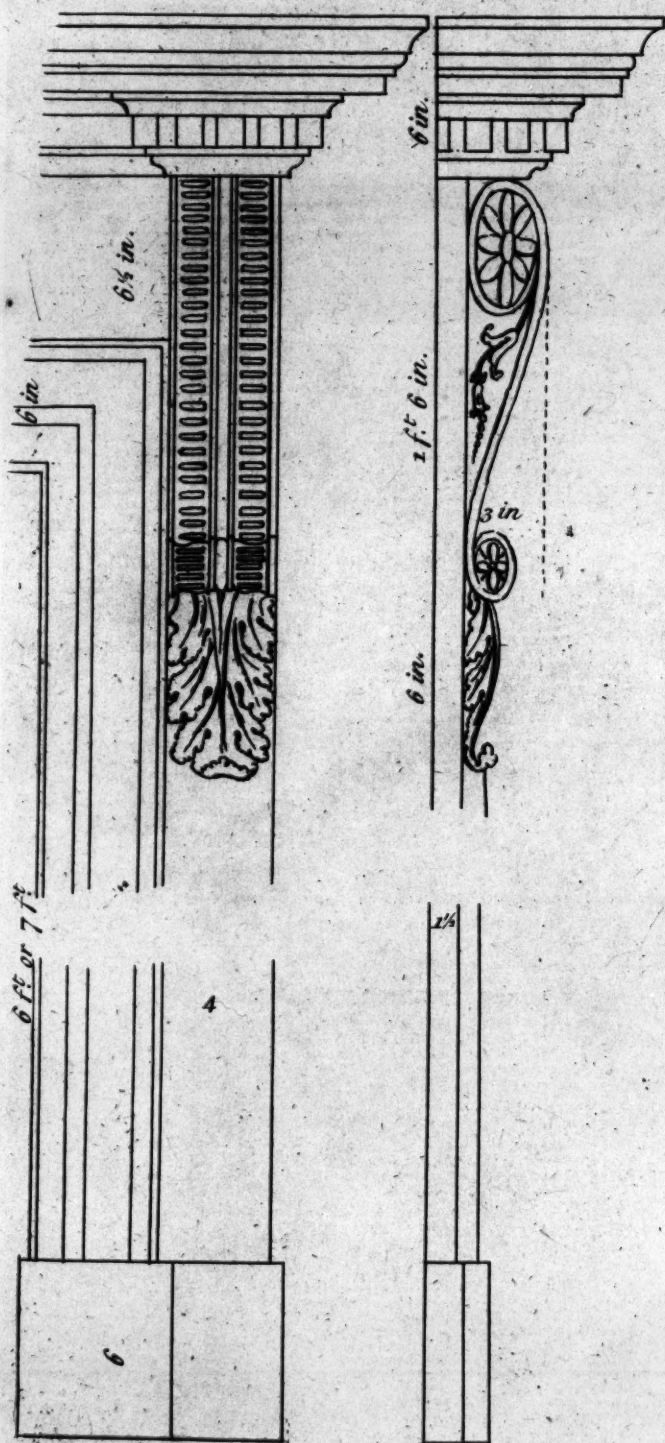
Guidelines for the Making of a Pediment &c.  
Divide the Width into 16 parts, give one to a Rib & one to a Space.







*Two Entablatures for Doors,  
the Measures figured.*



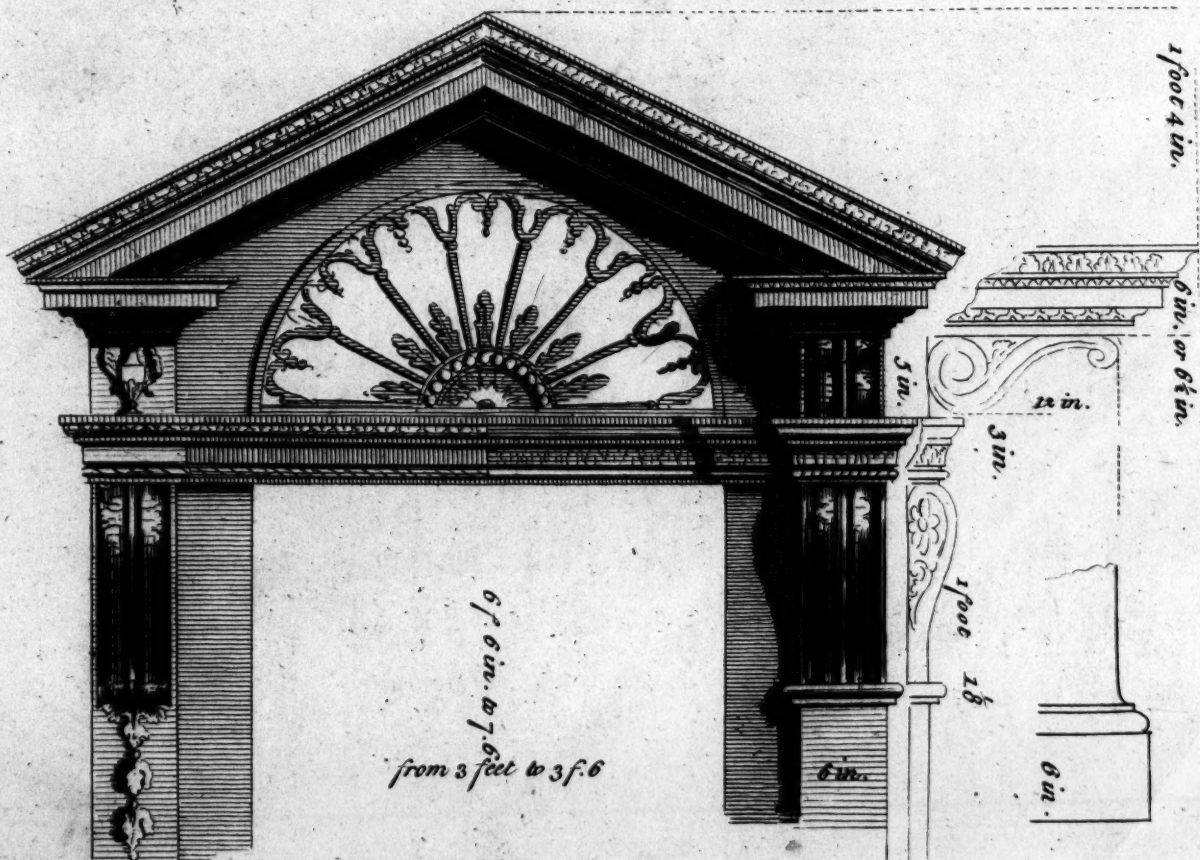
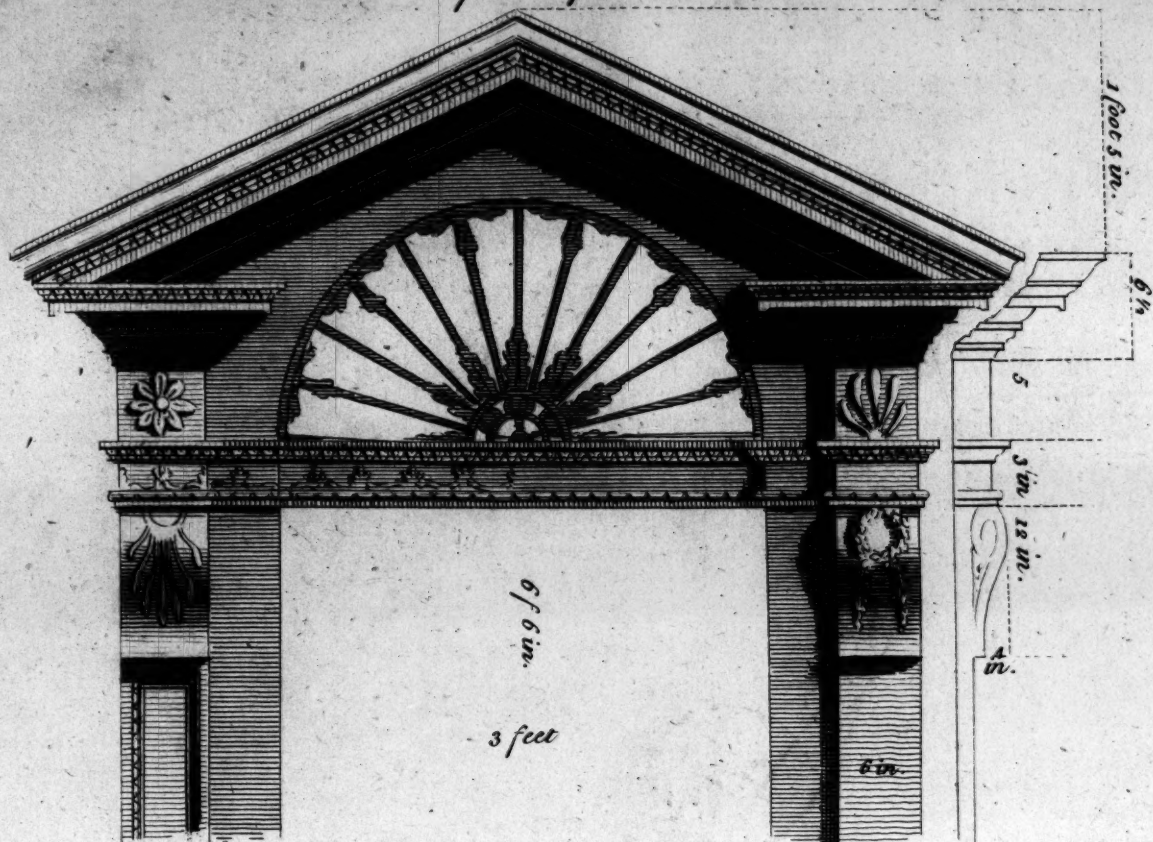






Frontispieces for Doors.

Plate XXXIV.



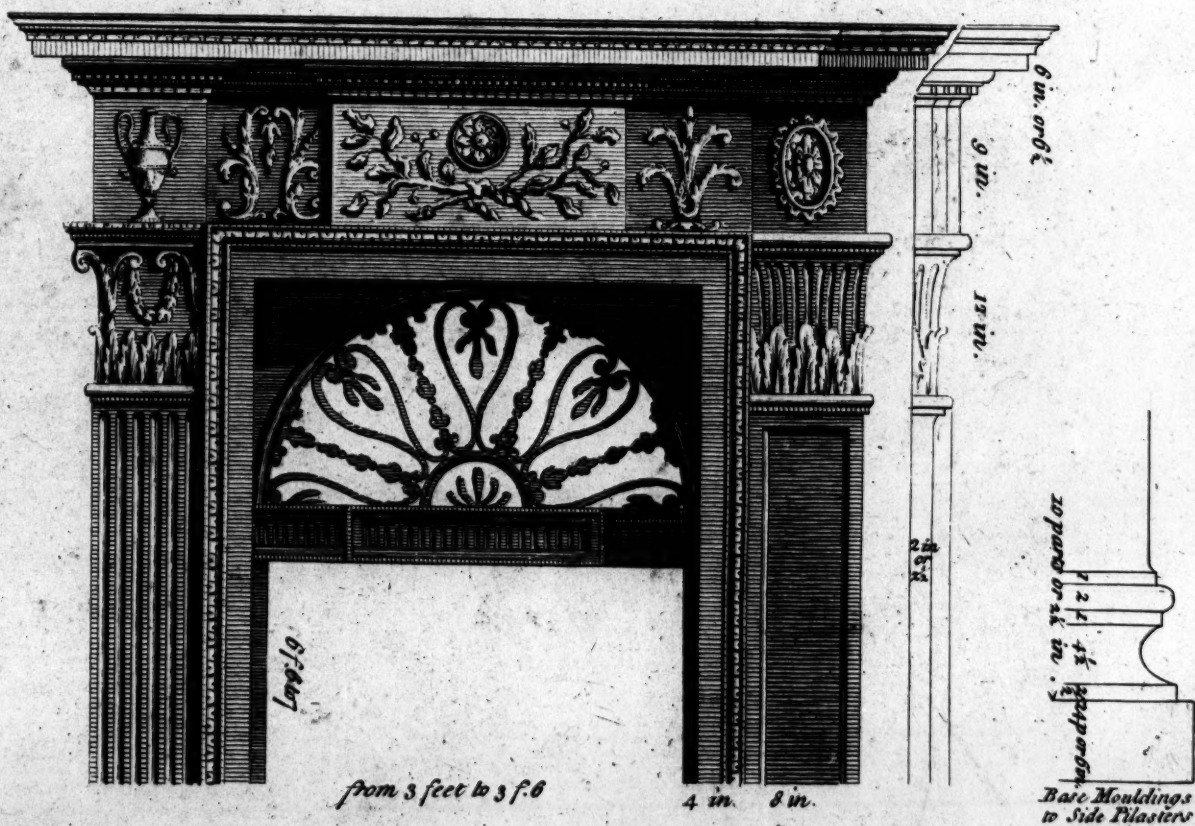
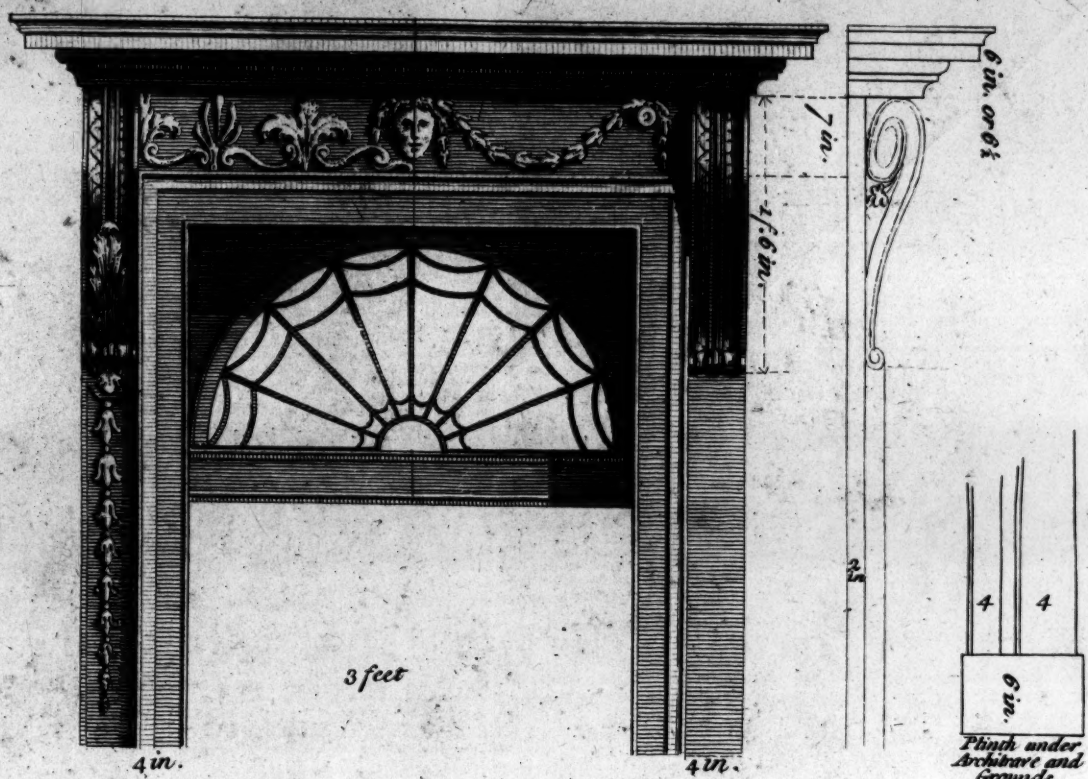






# *Designs for Door Cases.*

Plate XXXV.



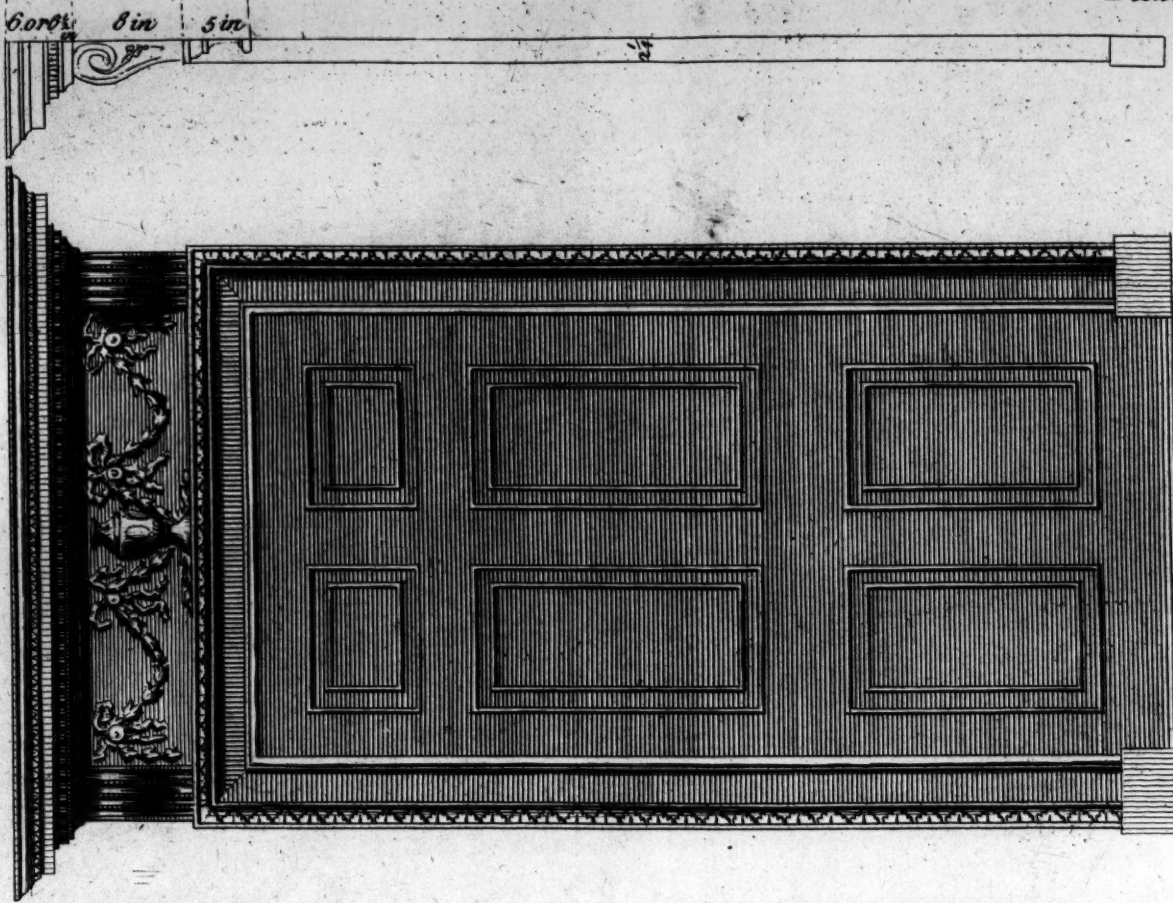




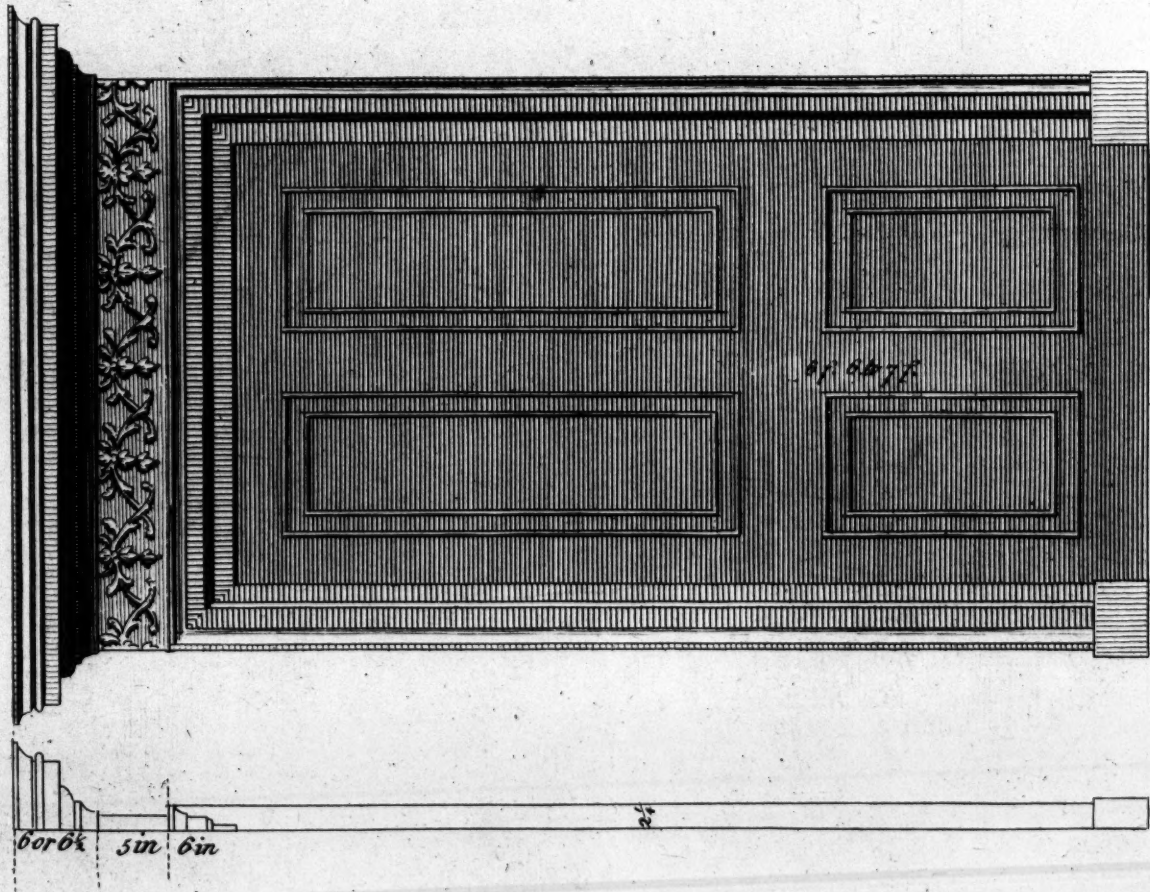


*Door Cases for Rooms.*

*Plate XXXVI.*



*3 ft. 10 3/8 in.*

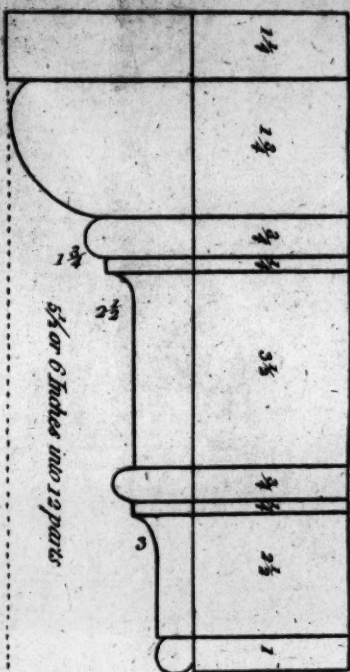
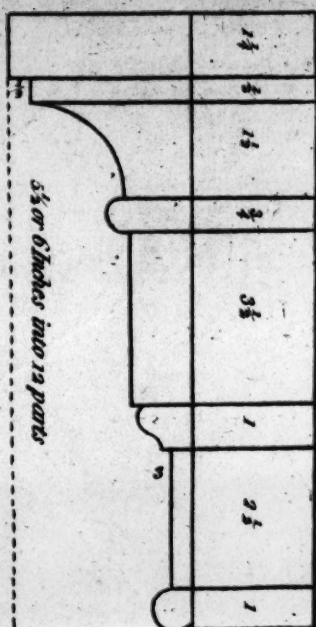


*3 ft. 10 3/8 in.*

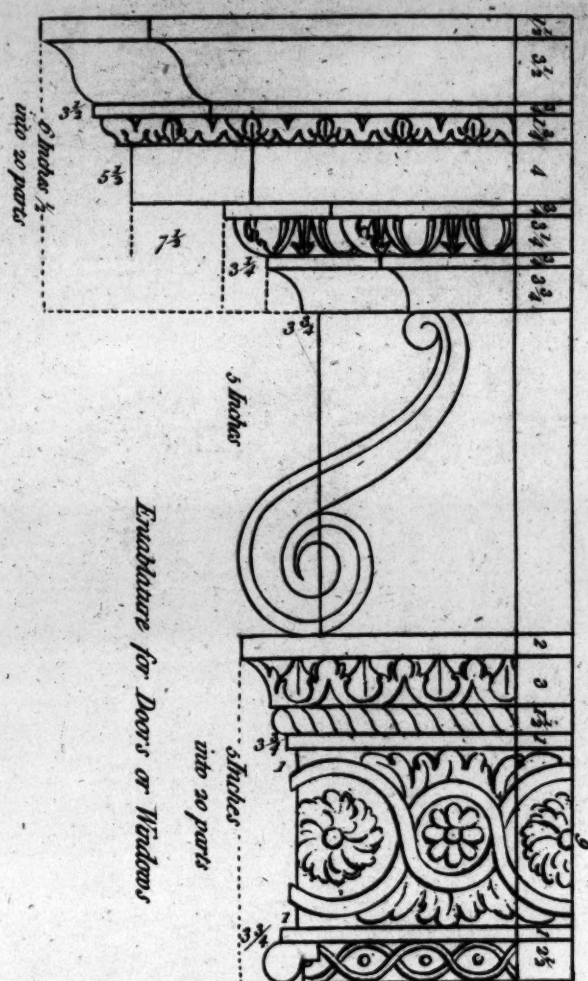
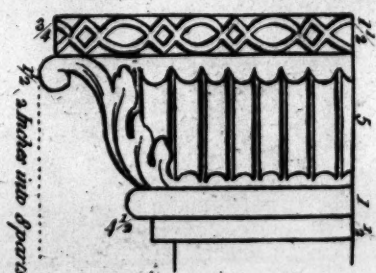
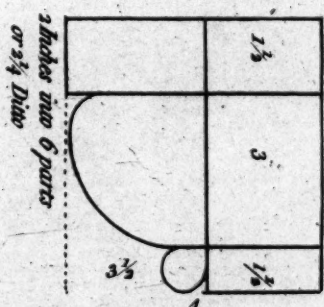
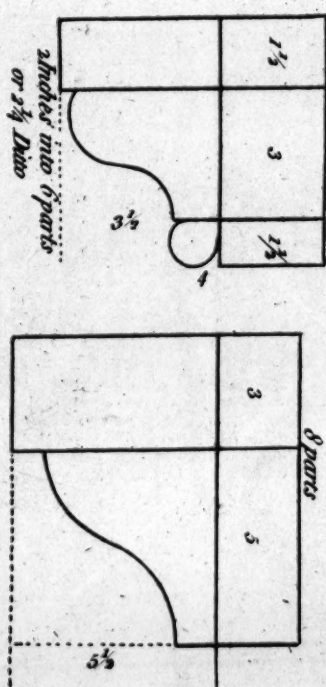
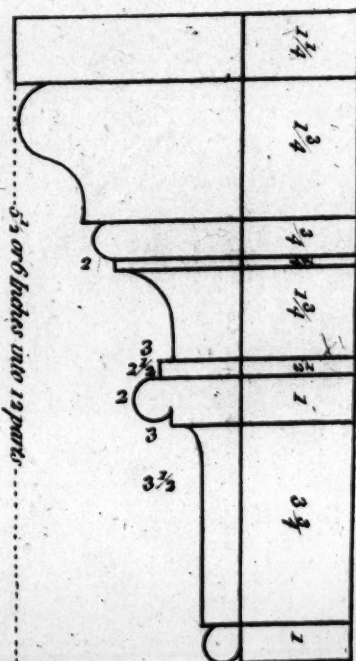








*Architrave Mouldings  
for Doors, Windows &c.*



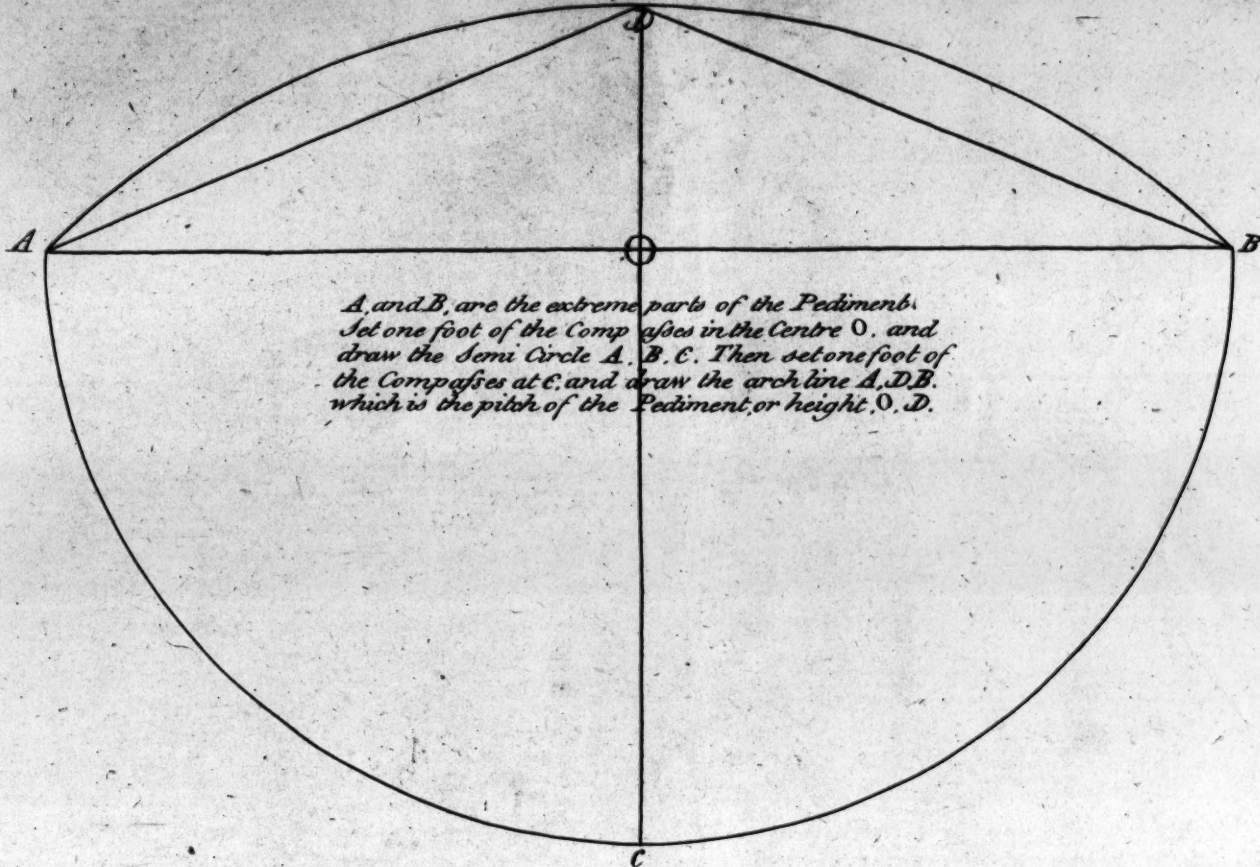




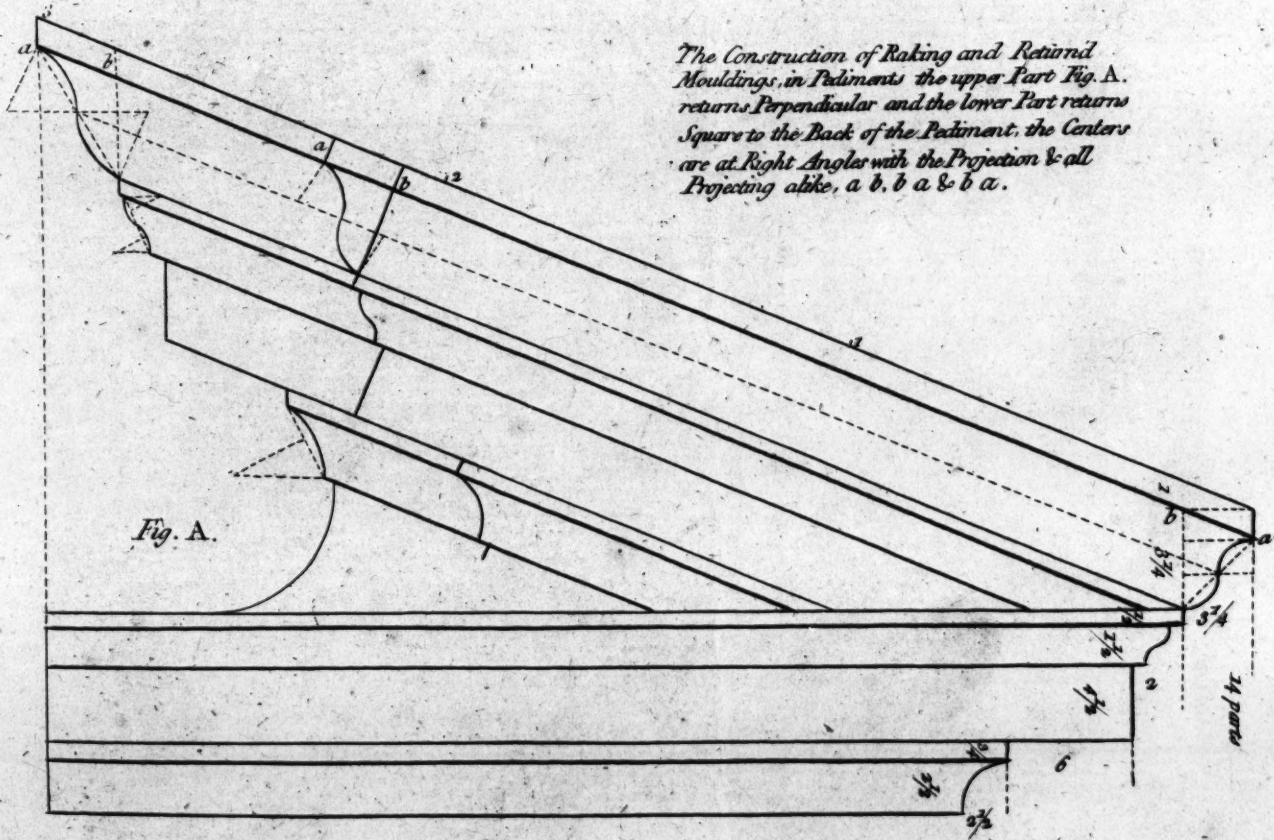


# *Pediment Pitch.*

Plate XXXVIII



*A and B, are the extreme parts of the Pediment.  
Set one foot of the Compasses in the Centre O, and  
draw the Semi Circle A. B. C. Then set one foot of  
the Compasses at C, and draw the arch line A. D. B.  
which is the pitch of the Pediment, or height, O. D.*



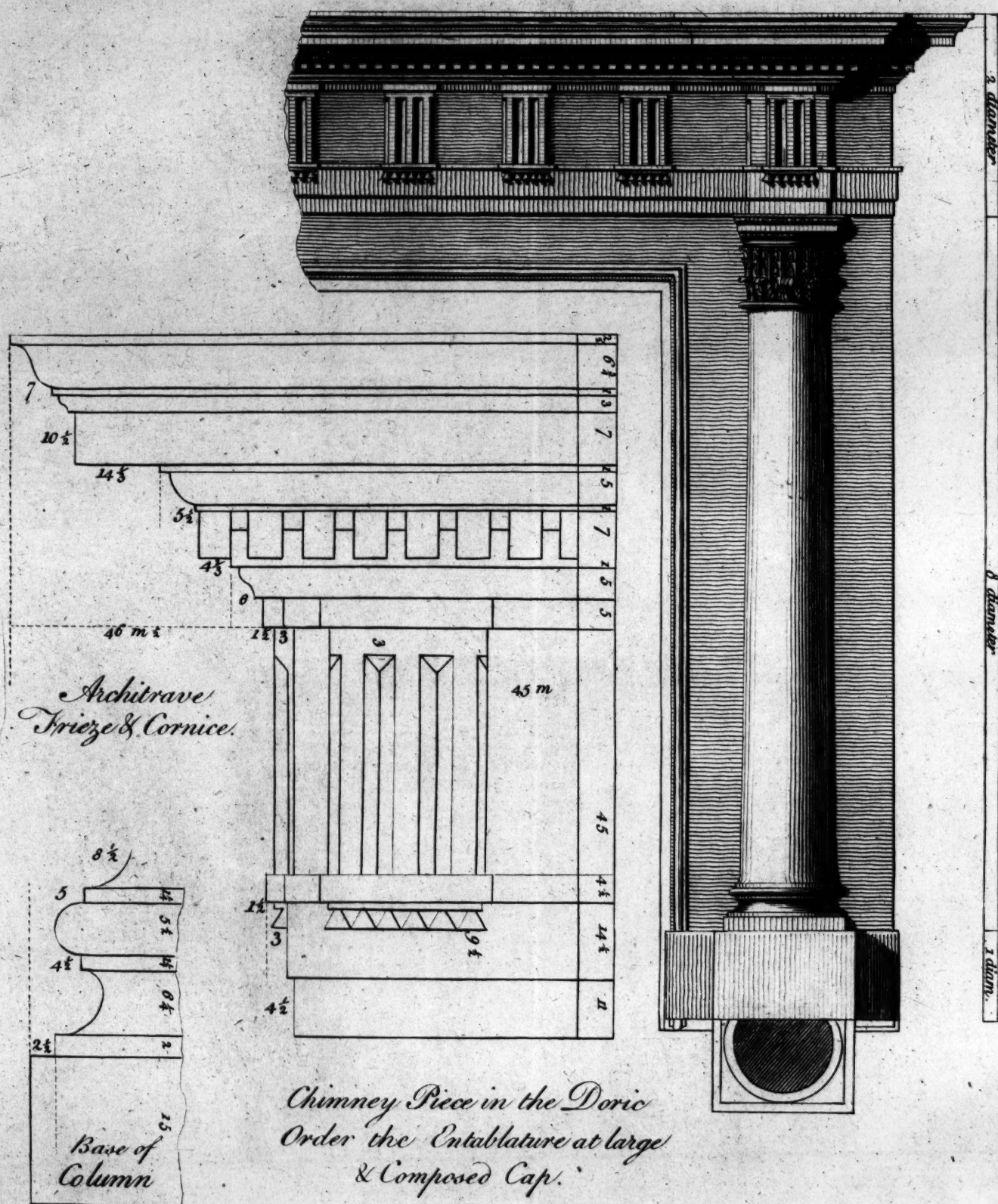
*The Construction of Raking and Retained  
Mouldings, in Pediments the upper Part Fig. A.  
returns Perpendicular and the lower Part returns  
Square to the Back of the Pediment, the Centers  
are at Right Angles with the Projection & all  
Projecting alike, a b, b a & b a.*

Fig. A.







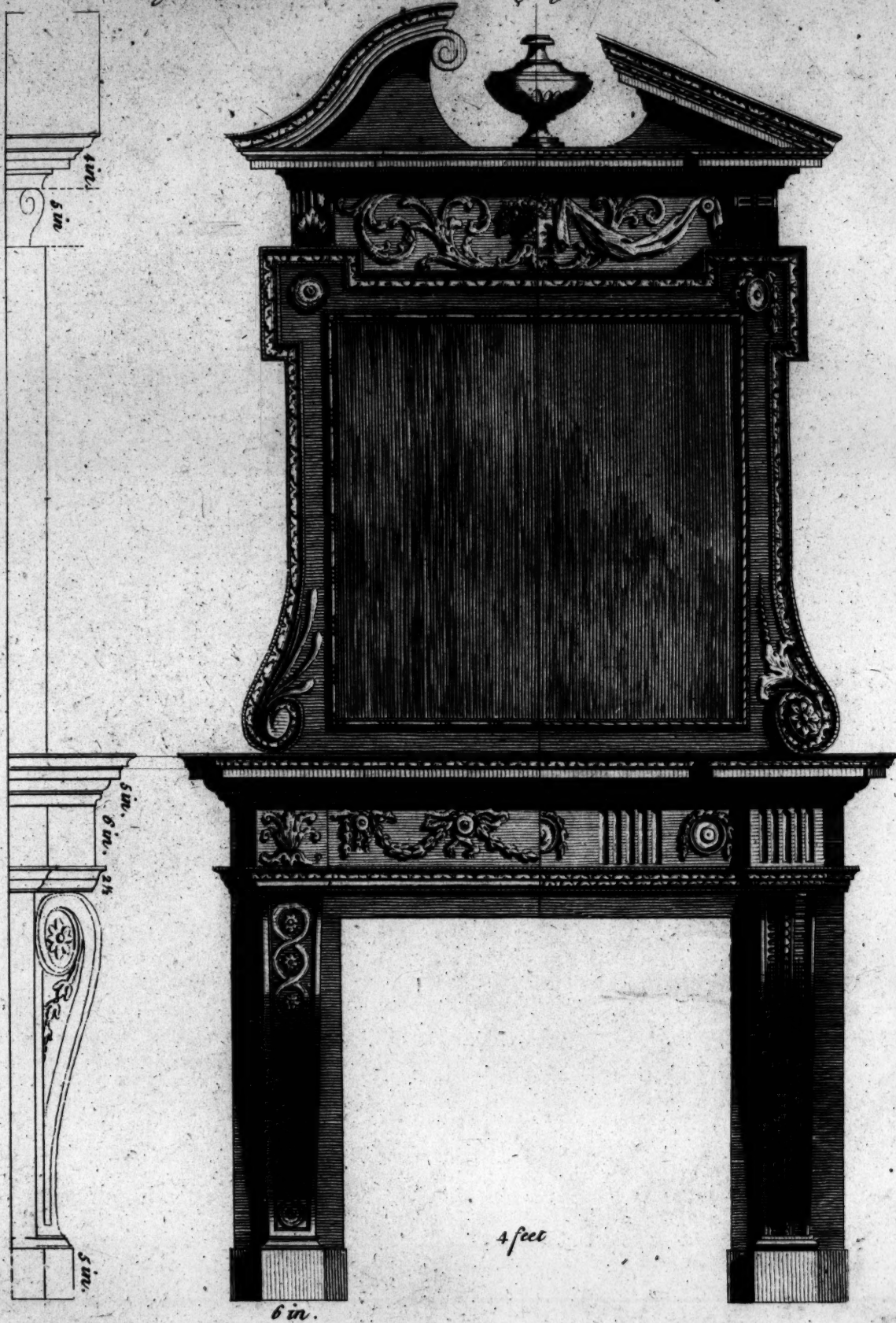








Two Chimney Pieces with open Pediment. Glass or Picture frames ornamented. Plate XL.

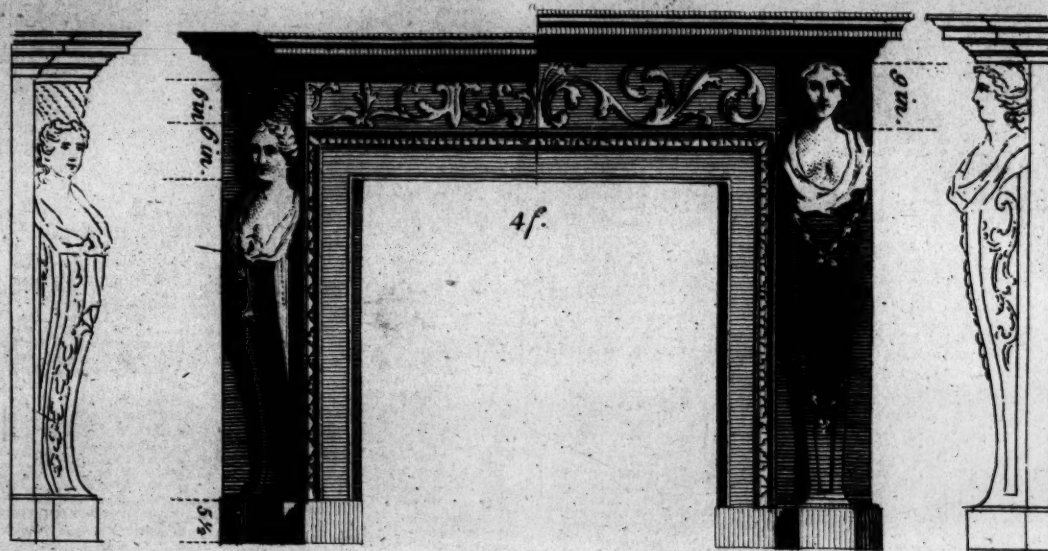




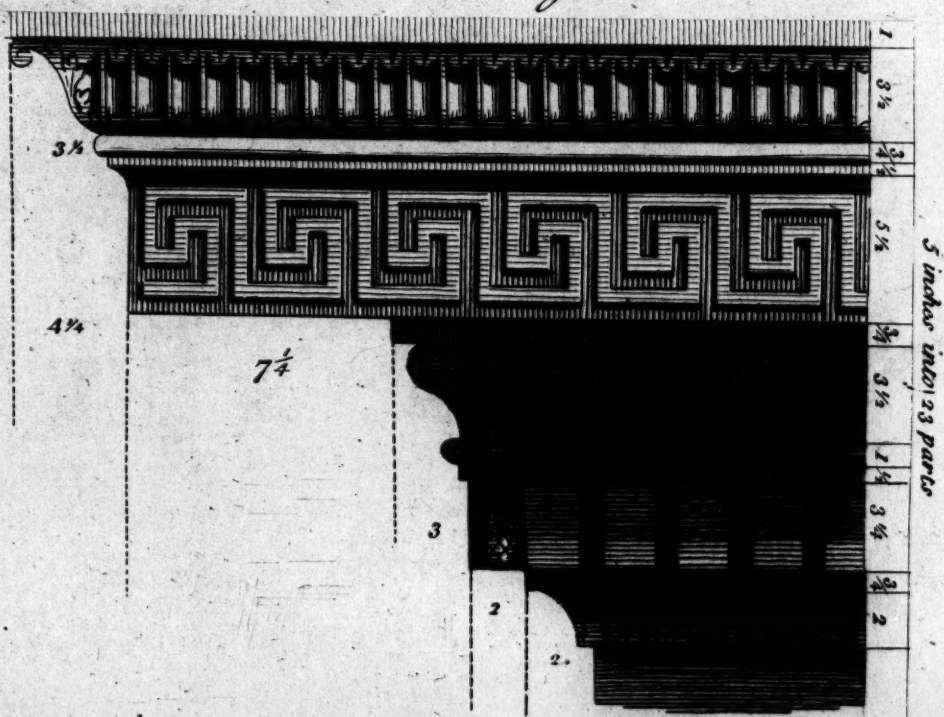




*Two Designs for Chimneys with Caryattic Figures.*



*Cornice at large.*

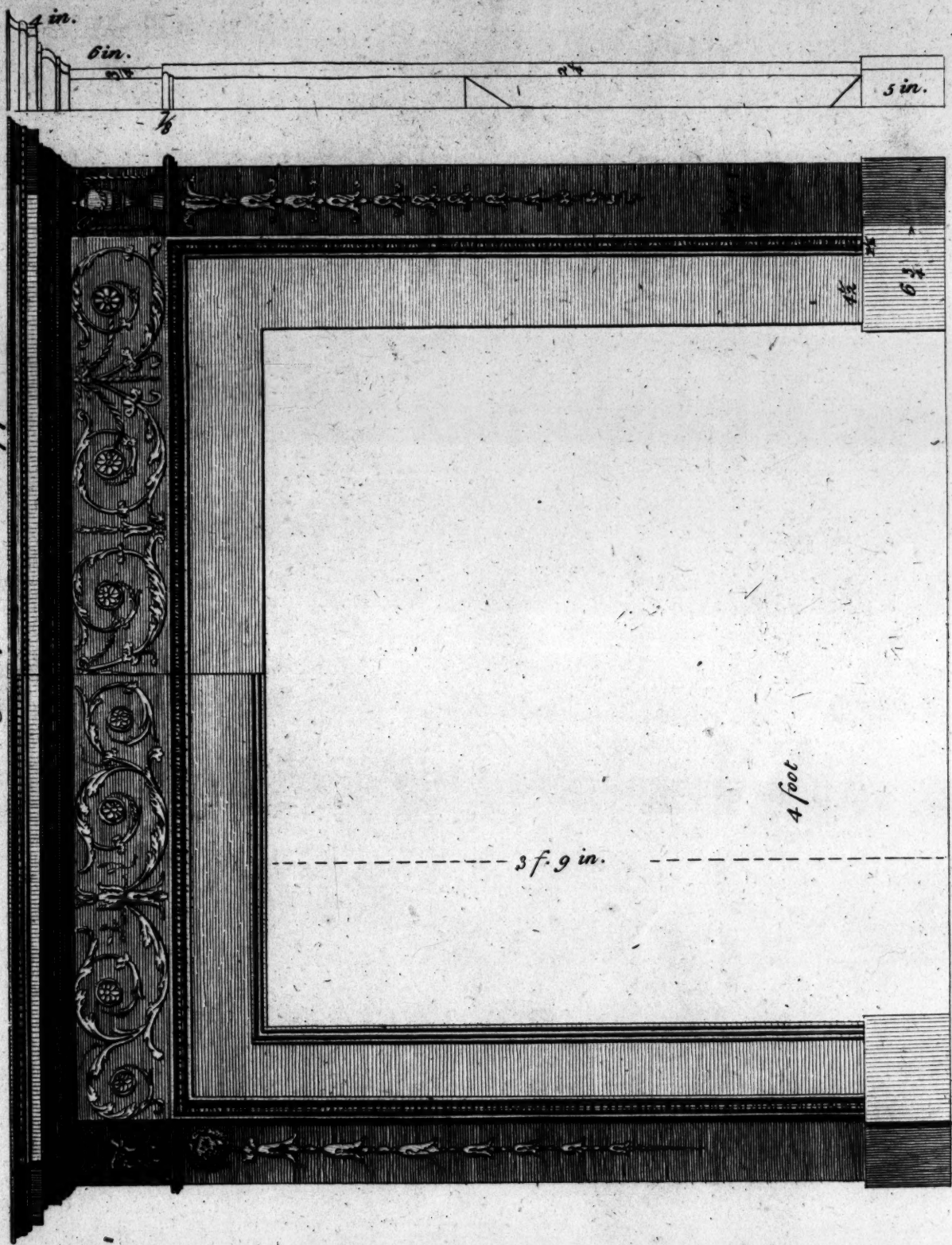








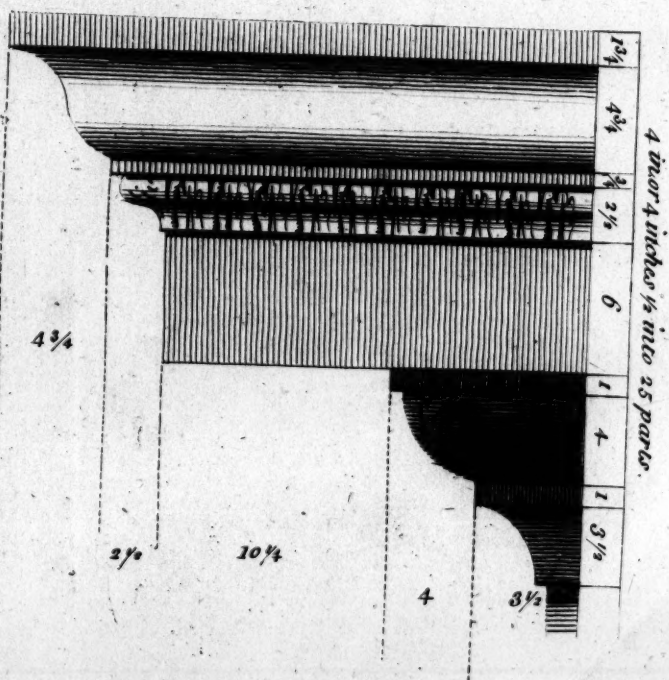
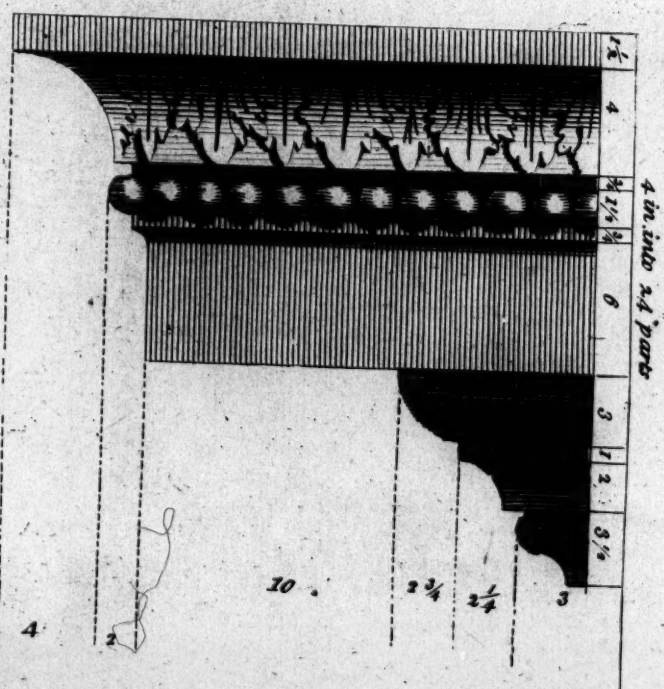
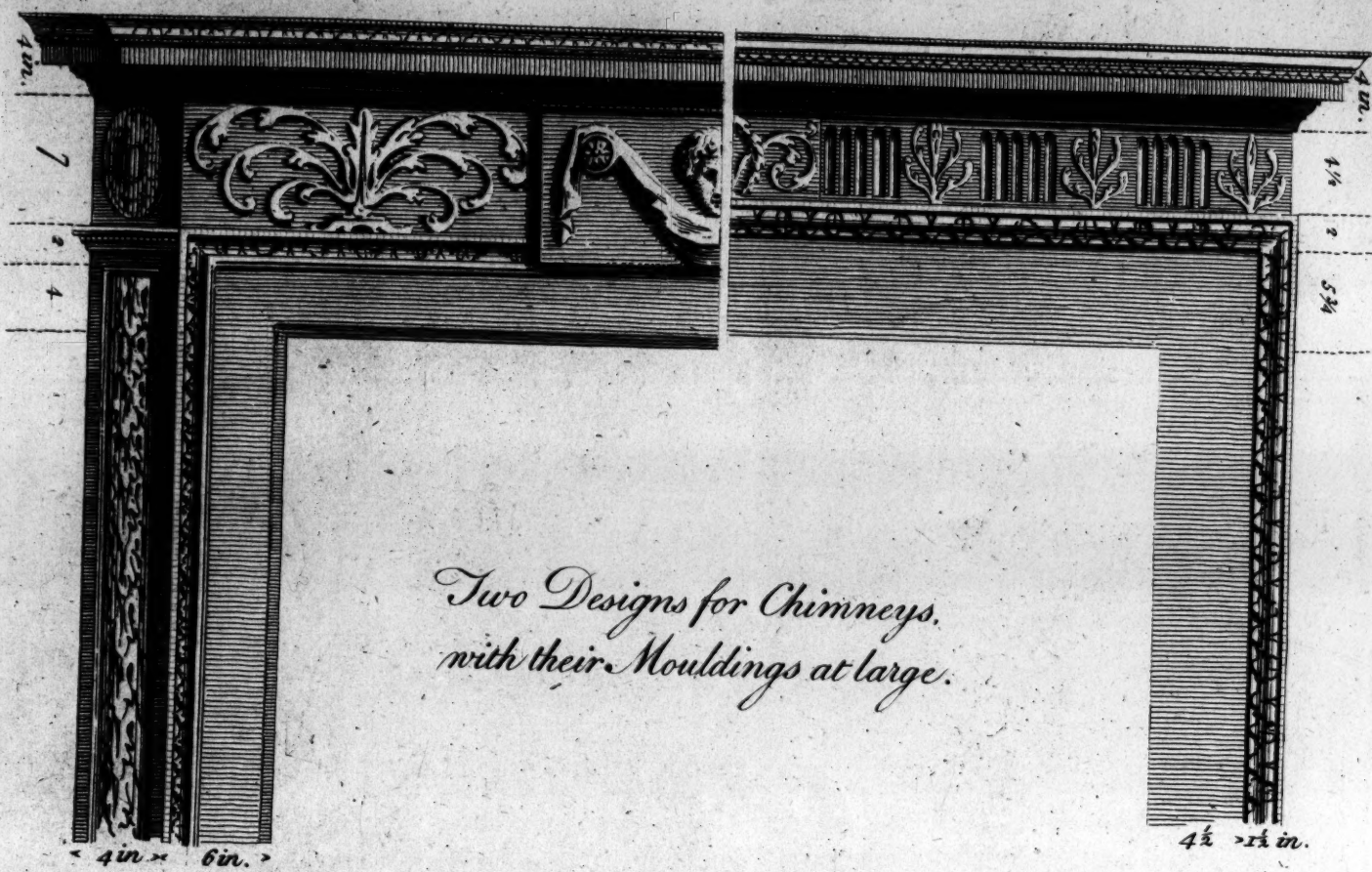
Two Designs for Chimney Pieces.









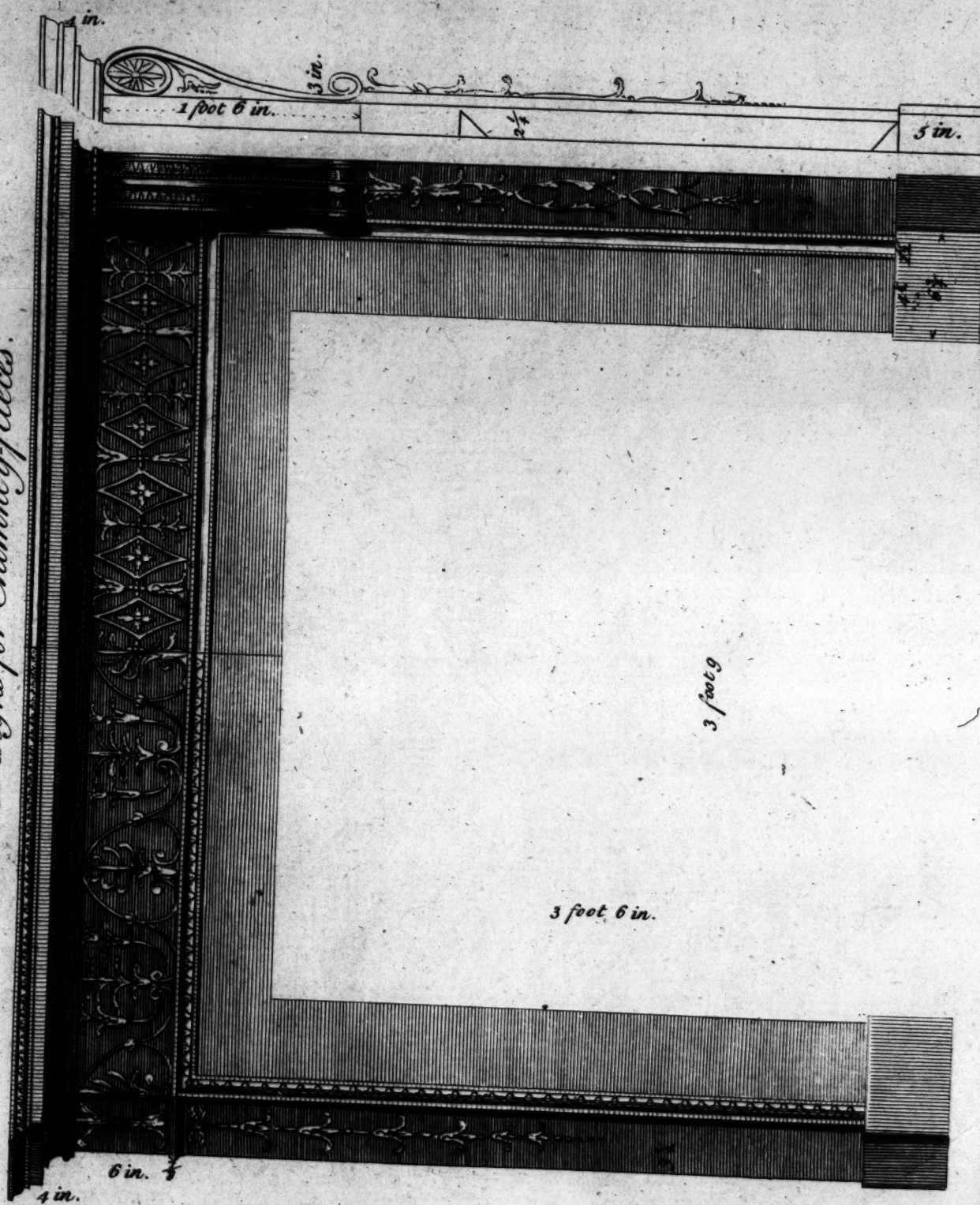








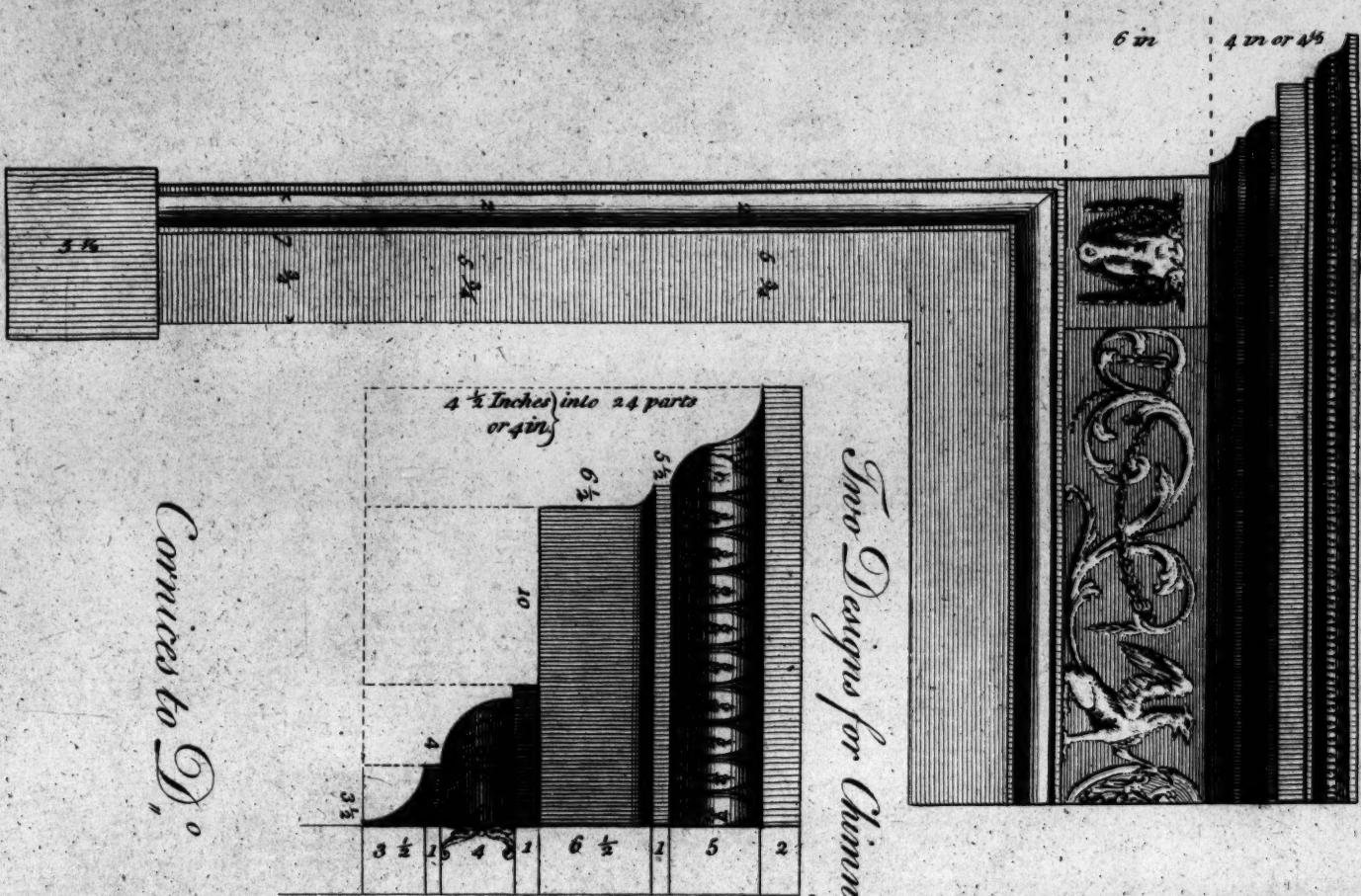
Two Designs for Chimney-pieces.



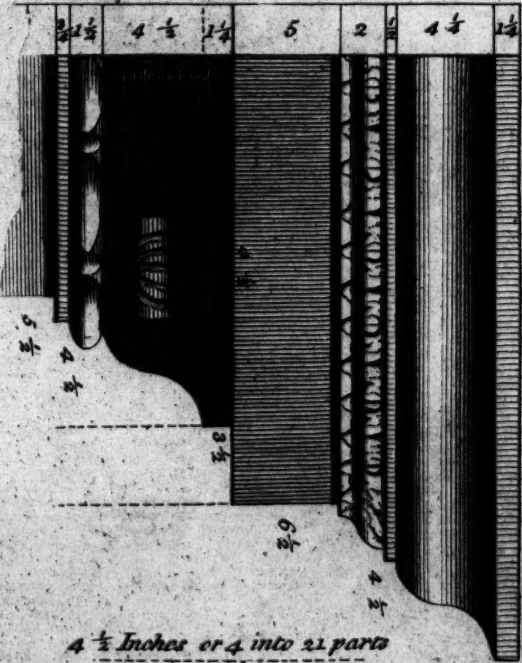
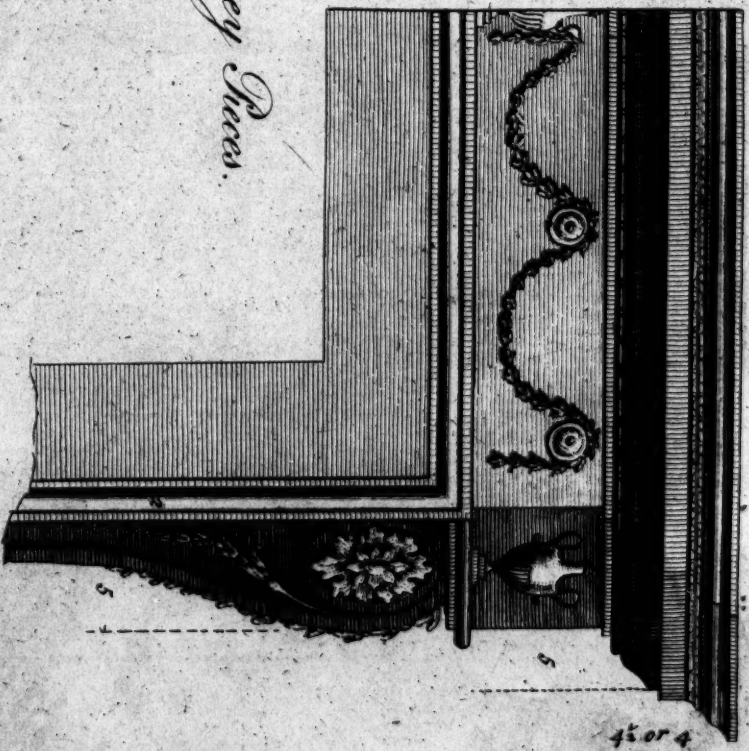








Two Designs for Chimney Pieces.

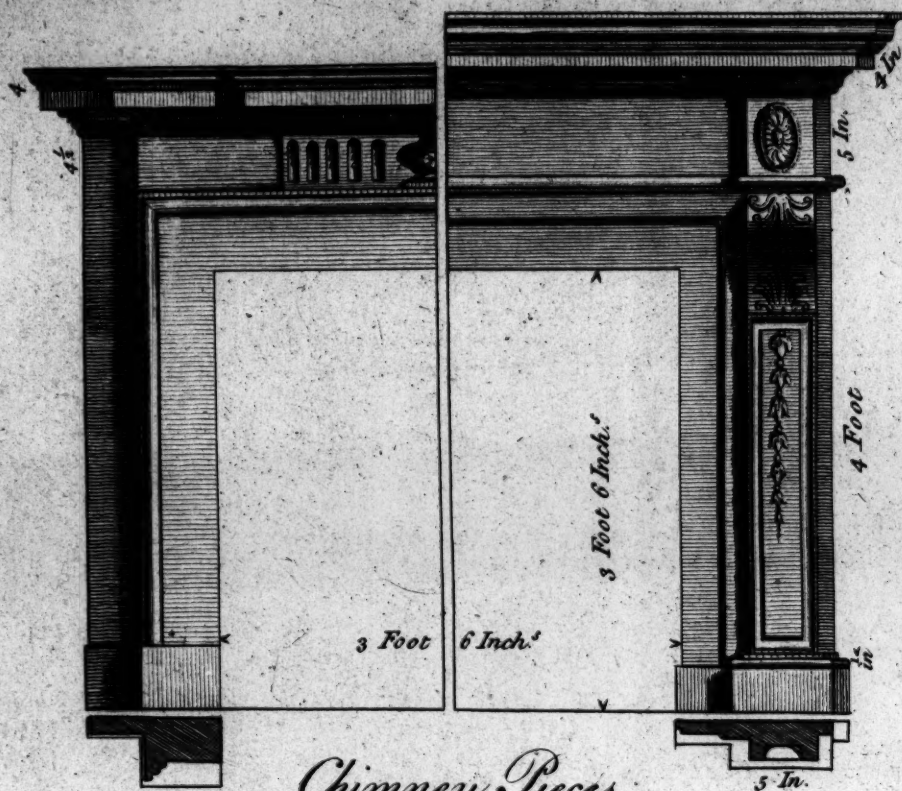


Coronets to D.

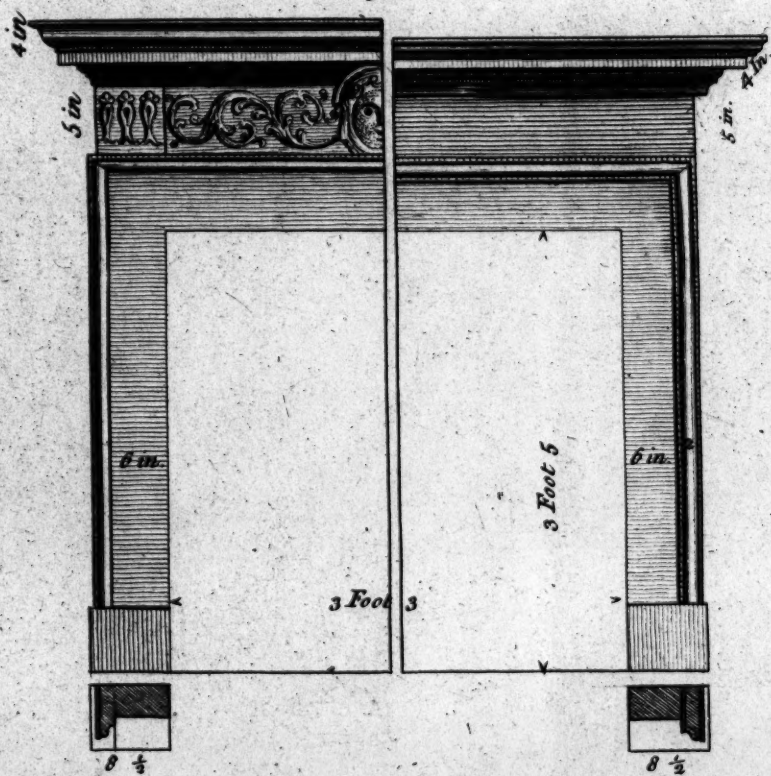








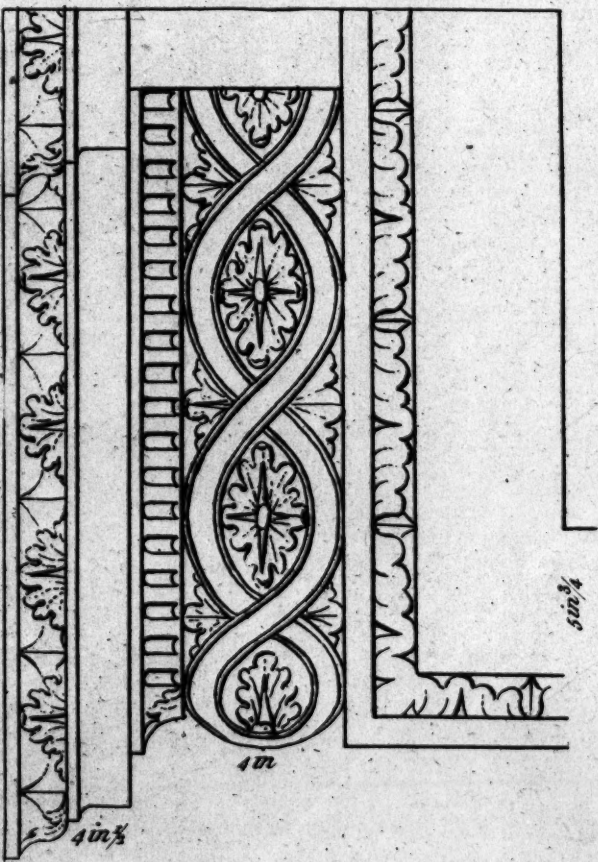
*Chimney Pieces.*



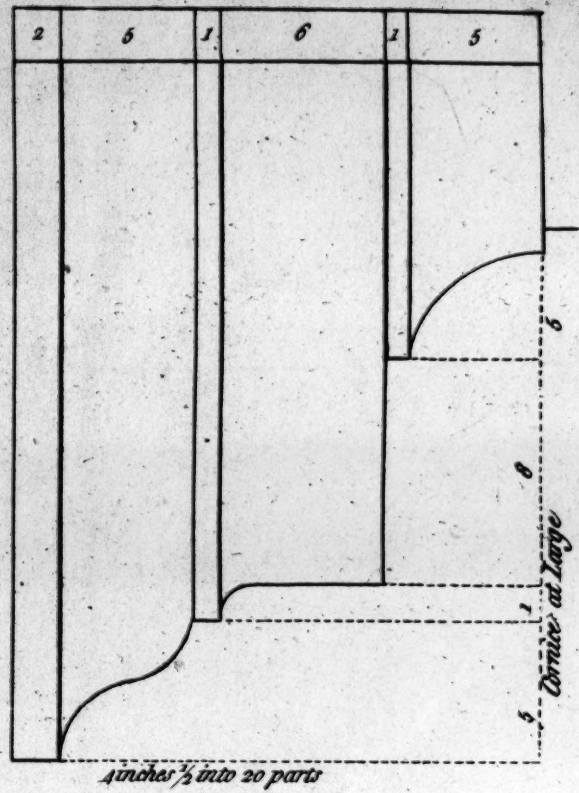
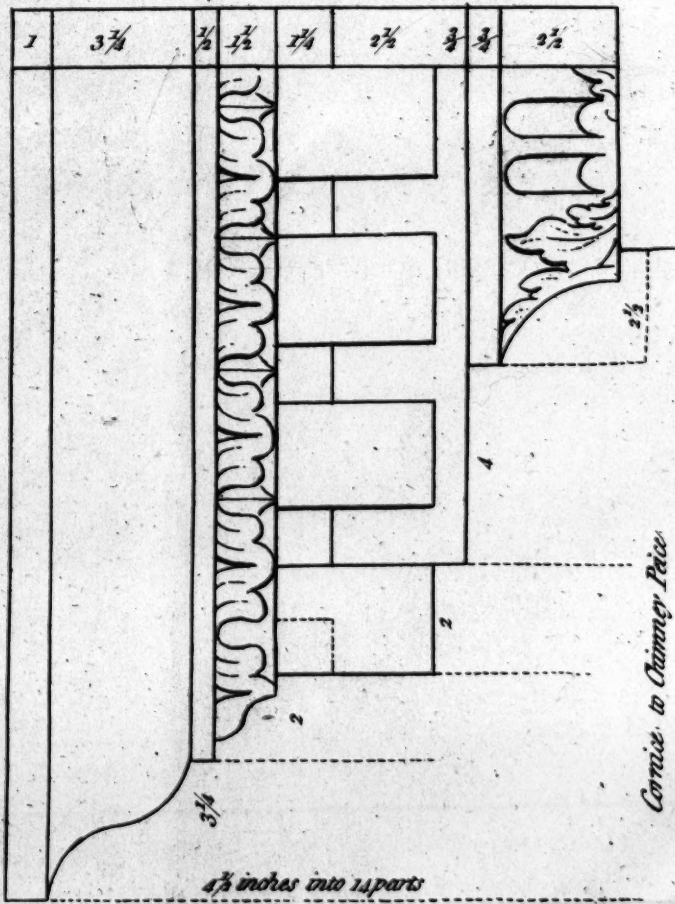
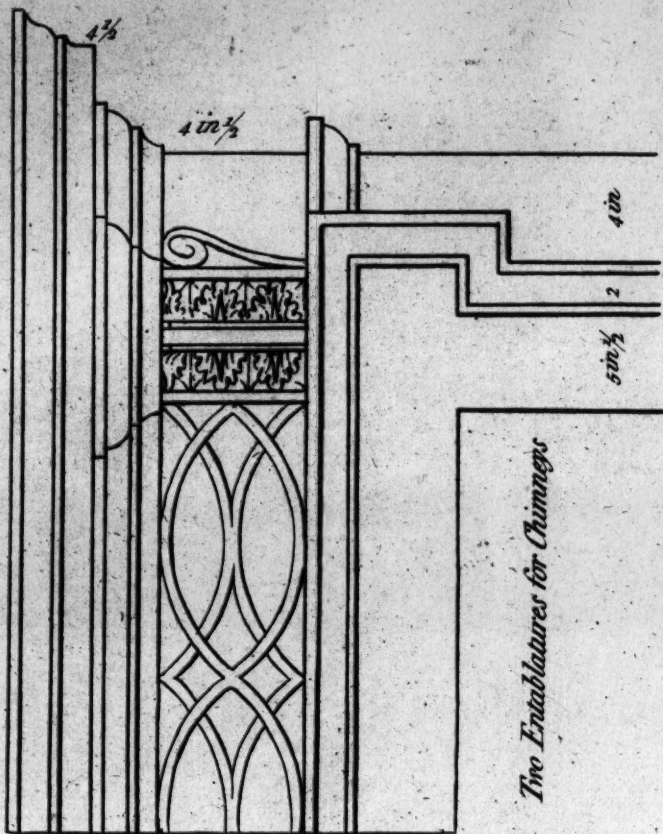








Two Entablatures for Chimneys



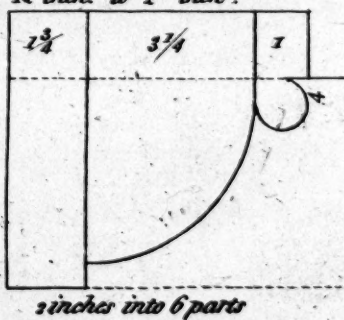
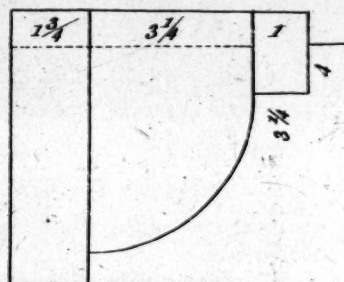
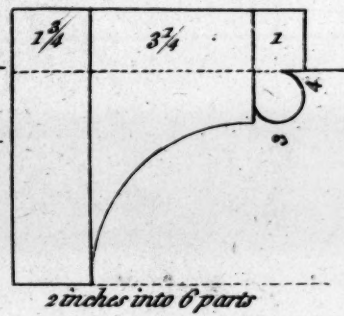
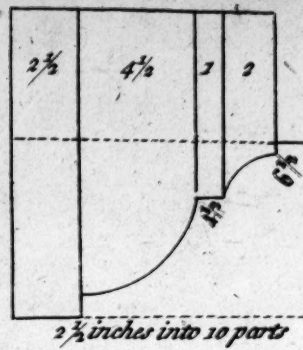
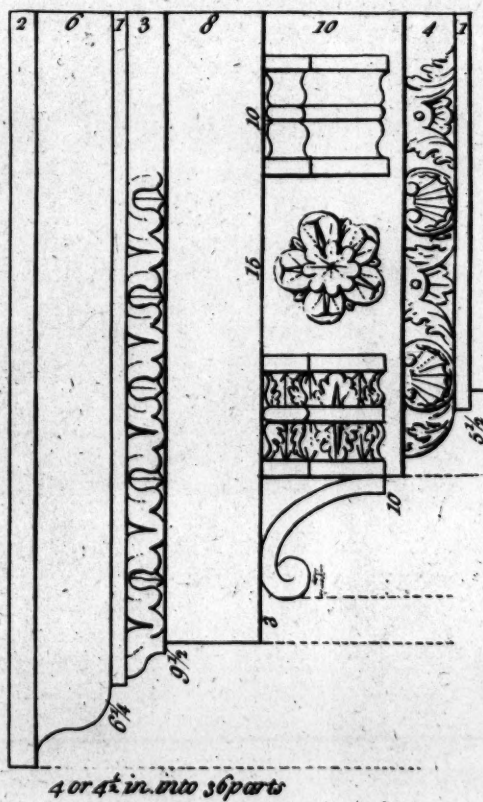
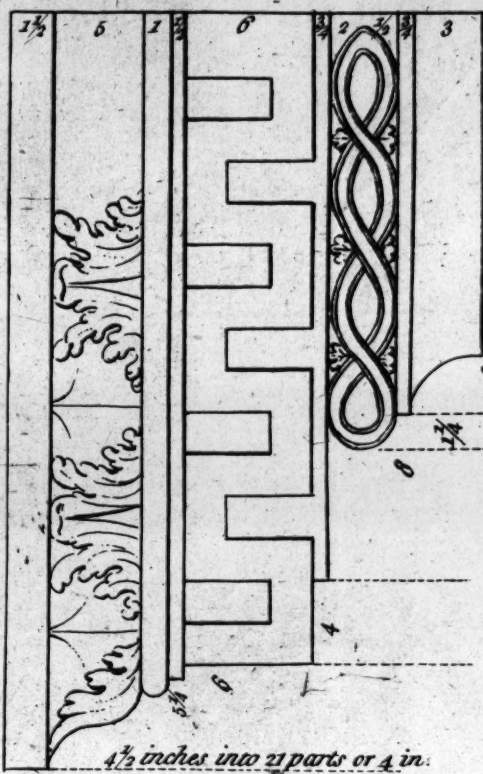
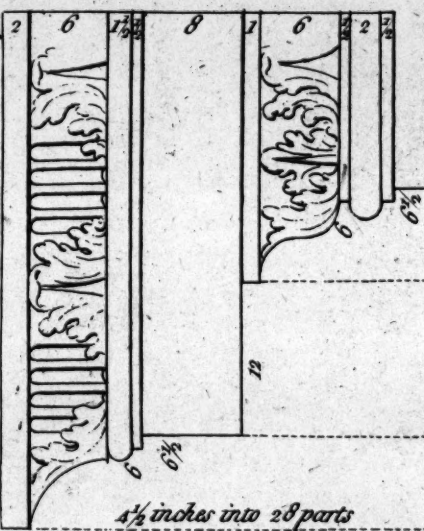
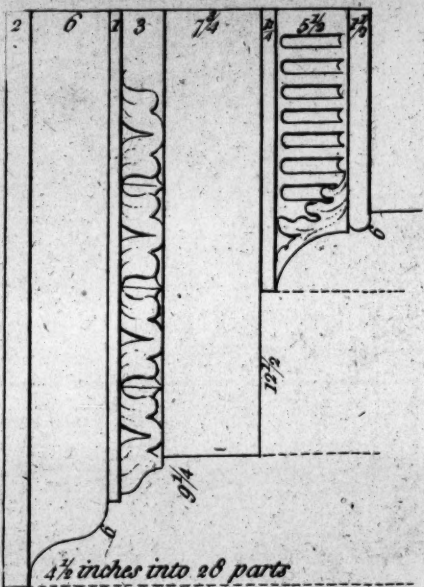
4 inches 1/2 into 20 parts

4 1/2 inches into 14 parts







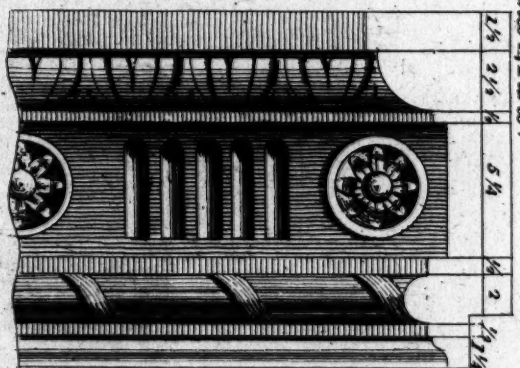
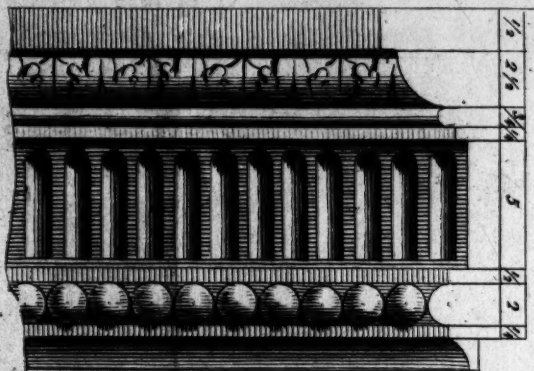








Mouldings for Looking Glass or Picture Frames.

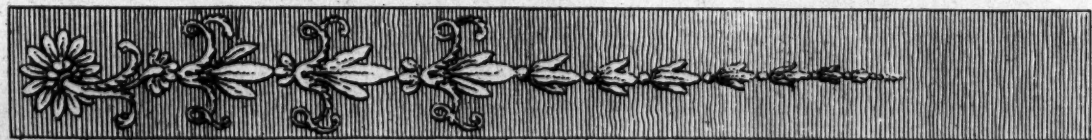
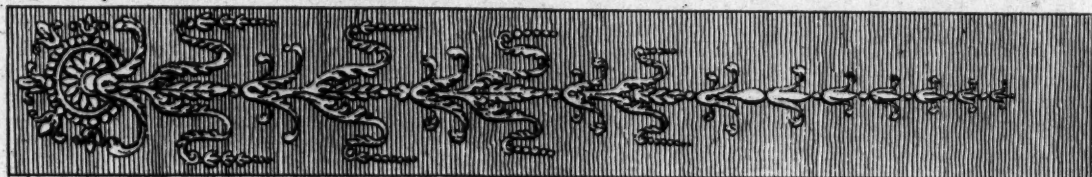
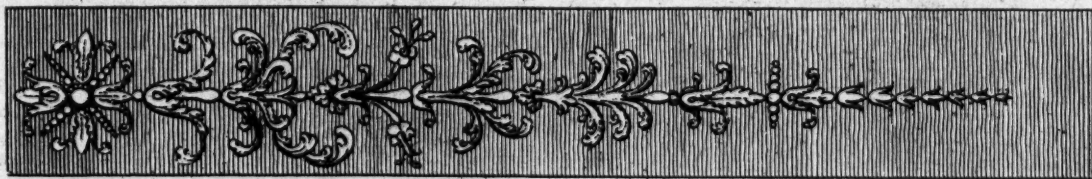
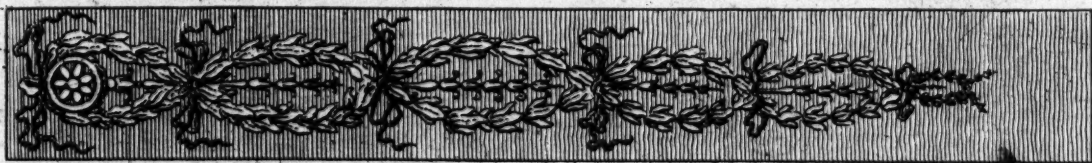
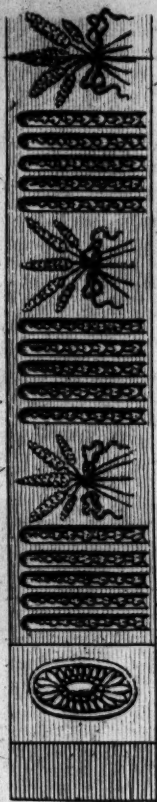


Each frame into 12 Parts.





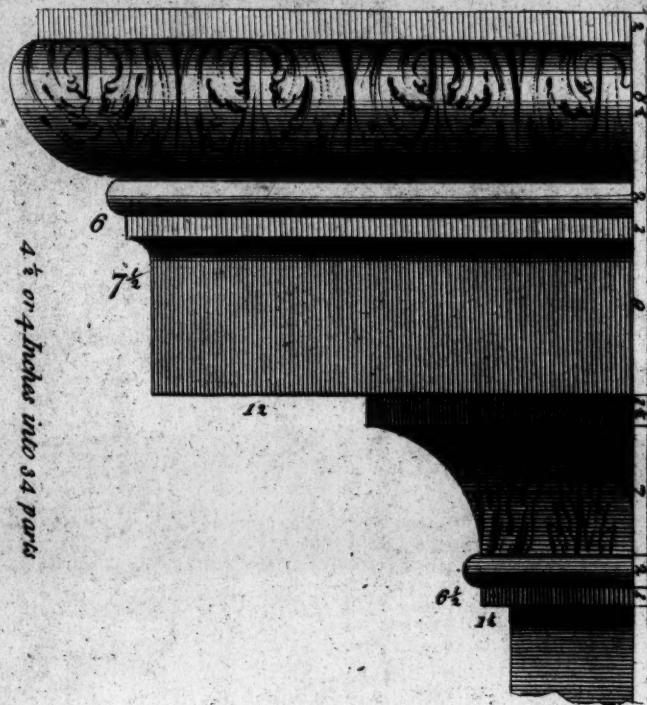
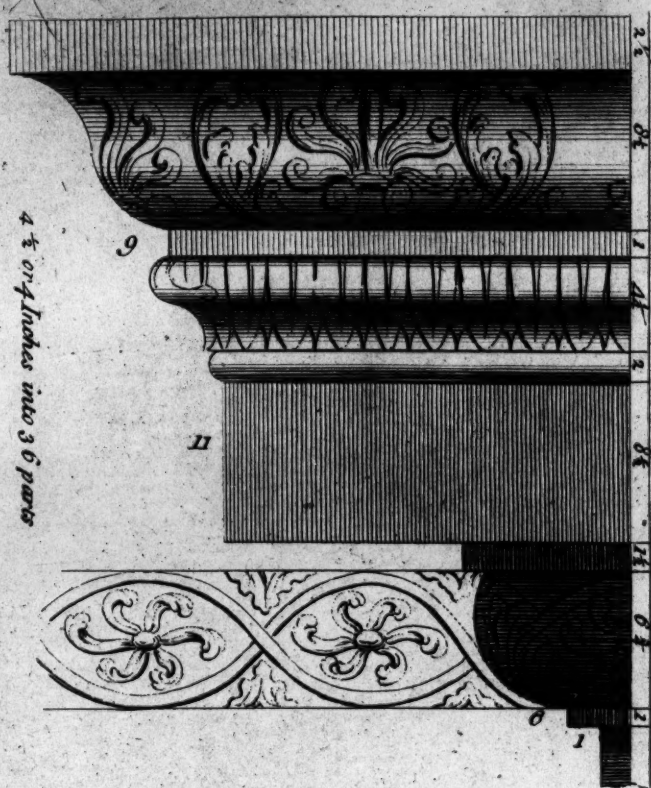




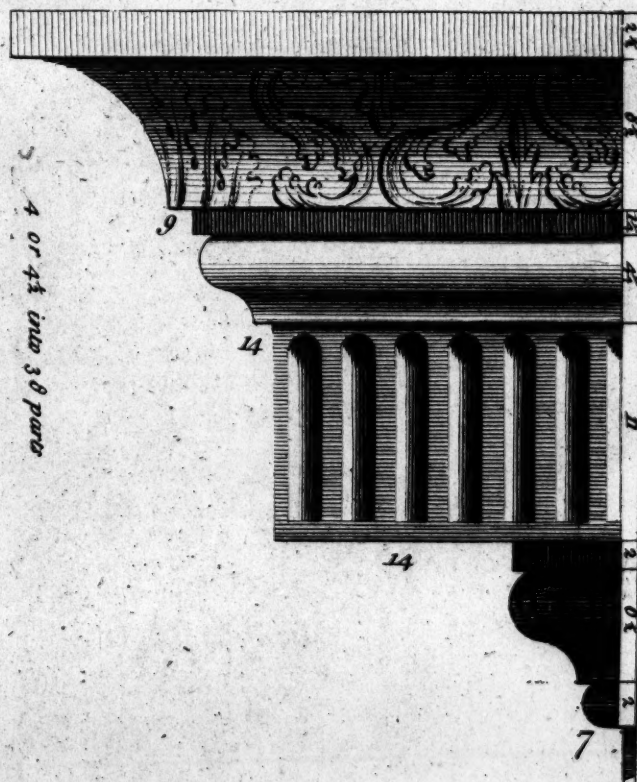
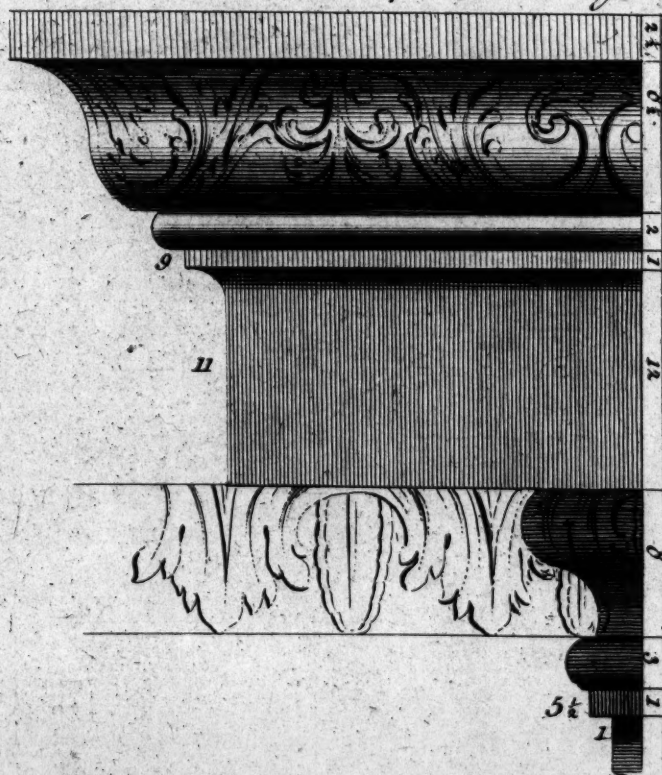








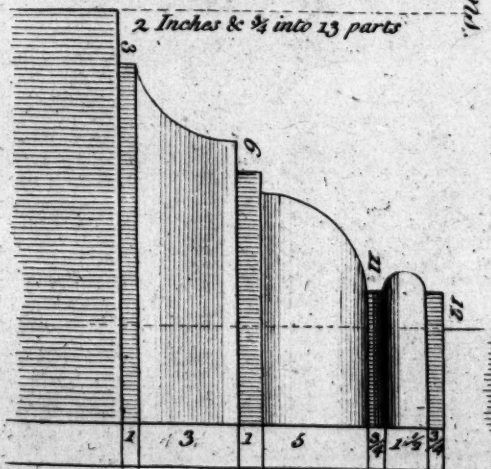
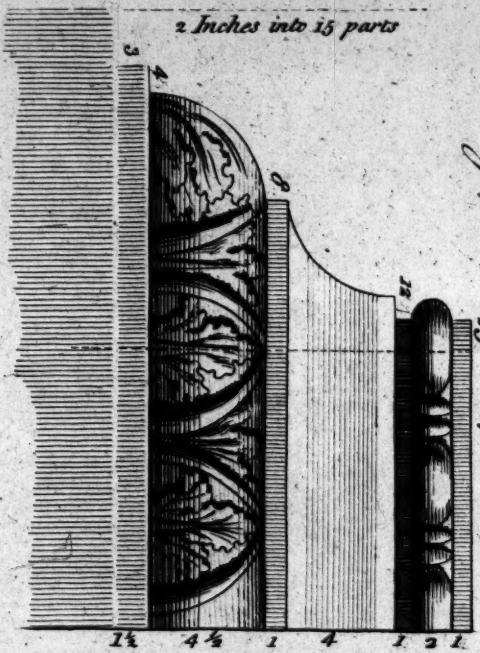
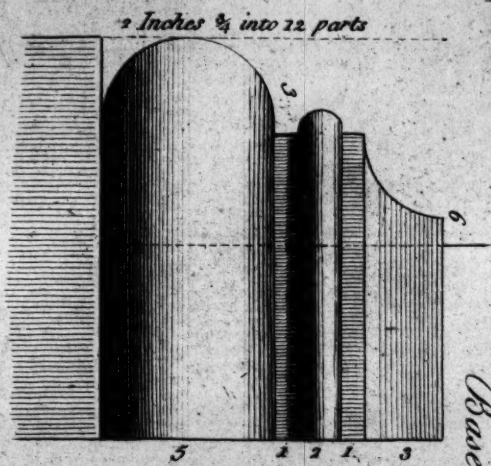
*Cornices for Chimney Caps Doors or Windows &c.*



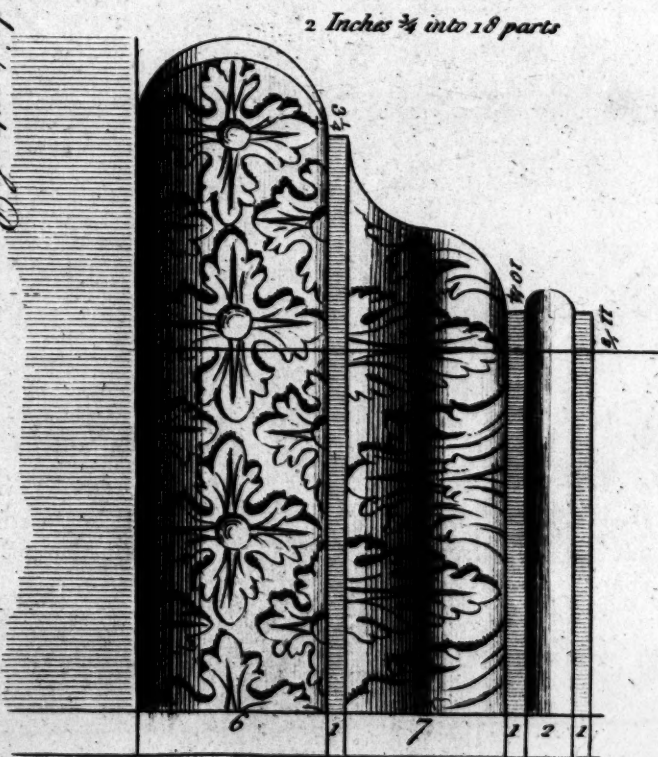
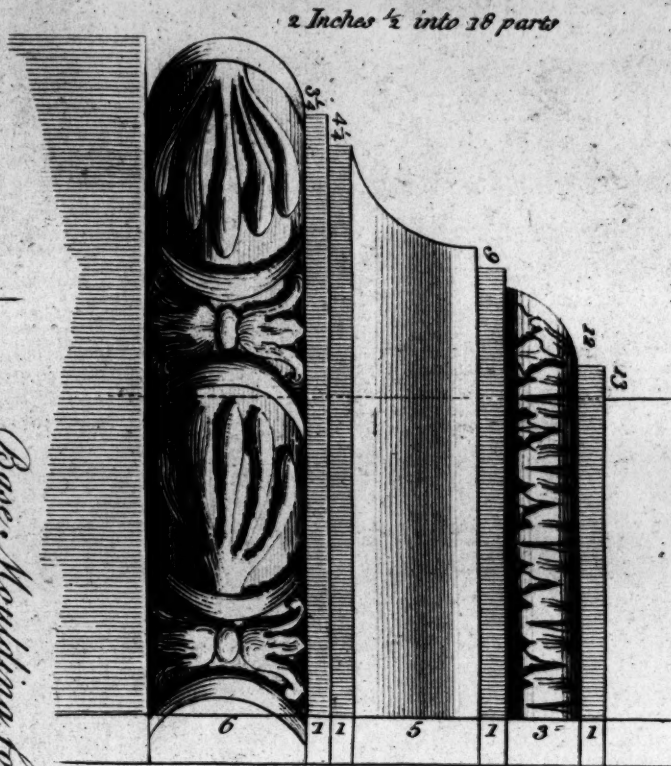








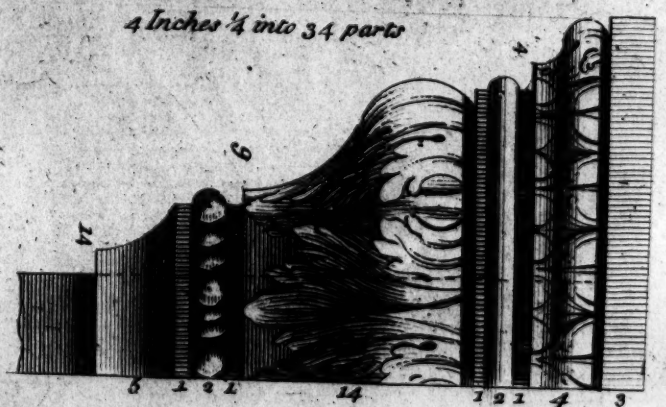
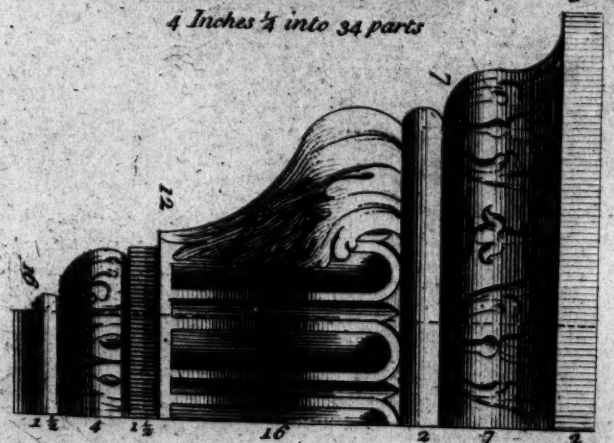
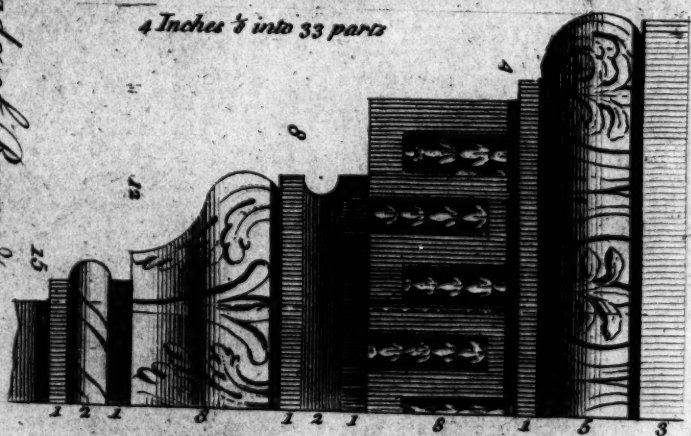
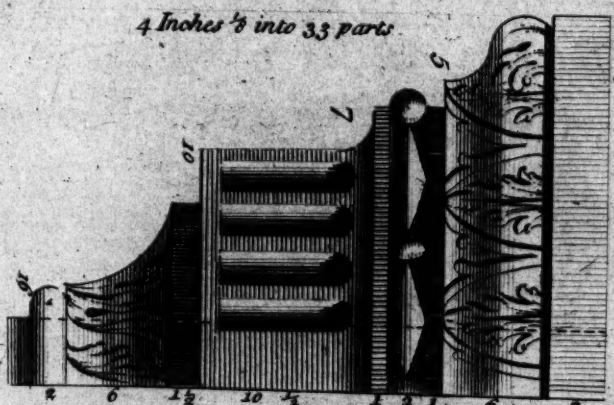
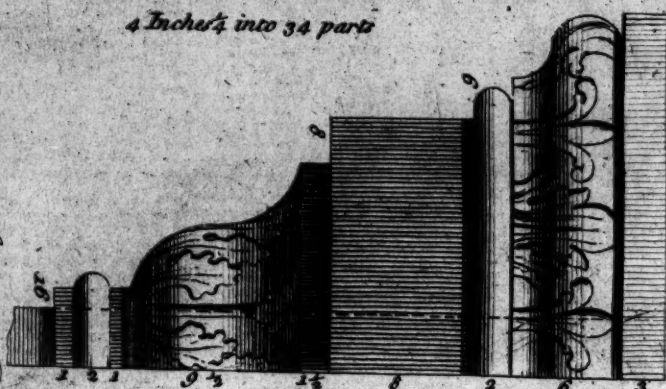
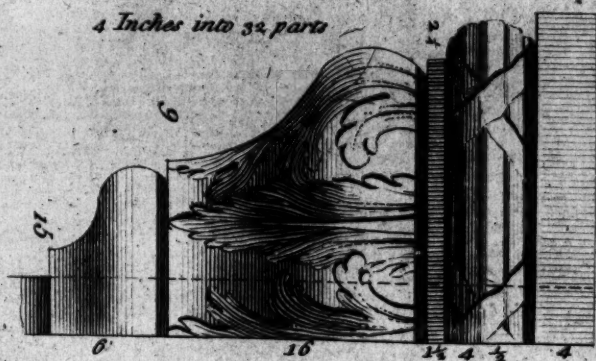
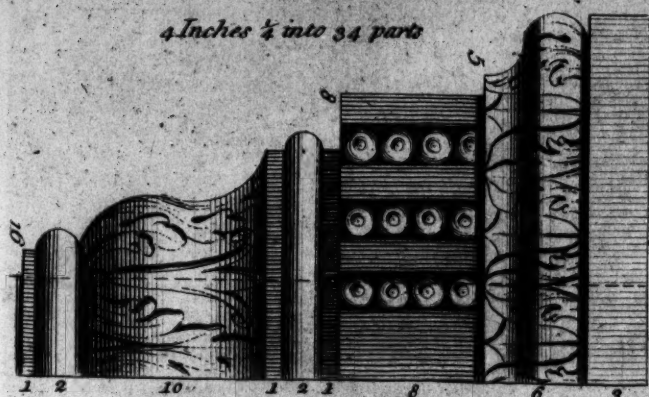
Base Moulding for the Plado part of Rooms.











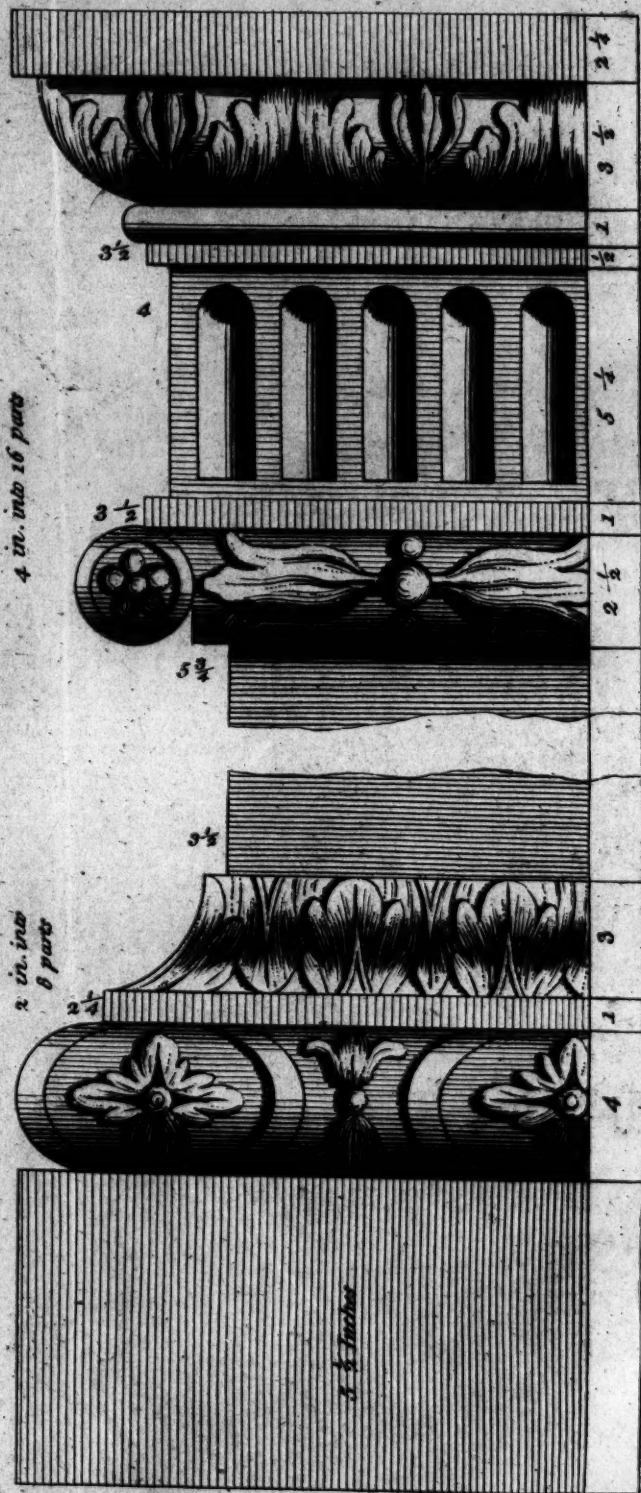
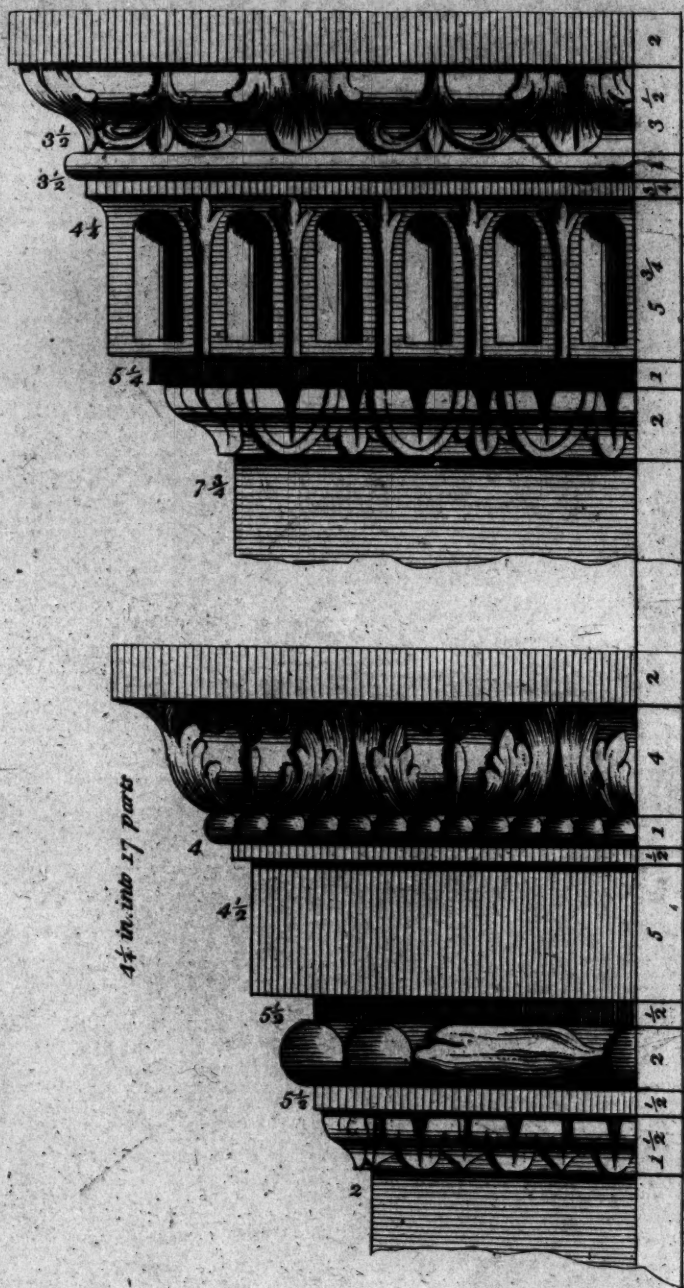
Substance for the Order of Doric &c.







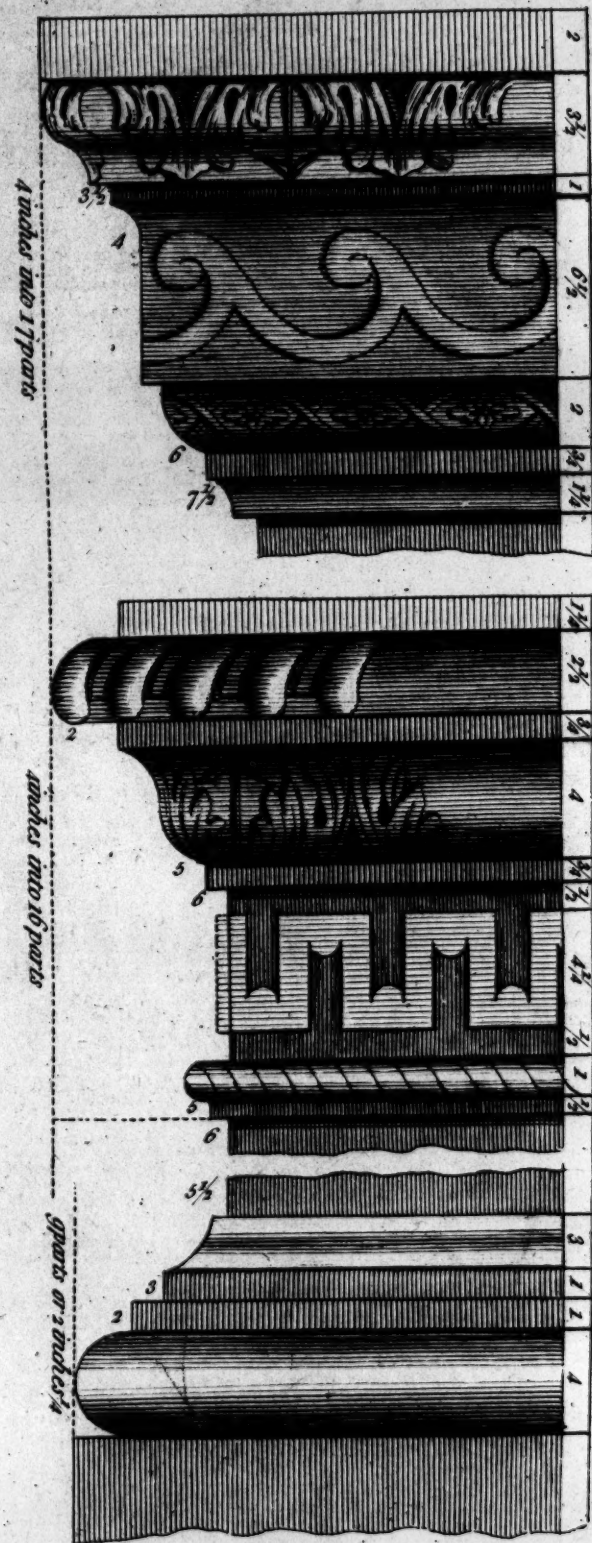
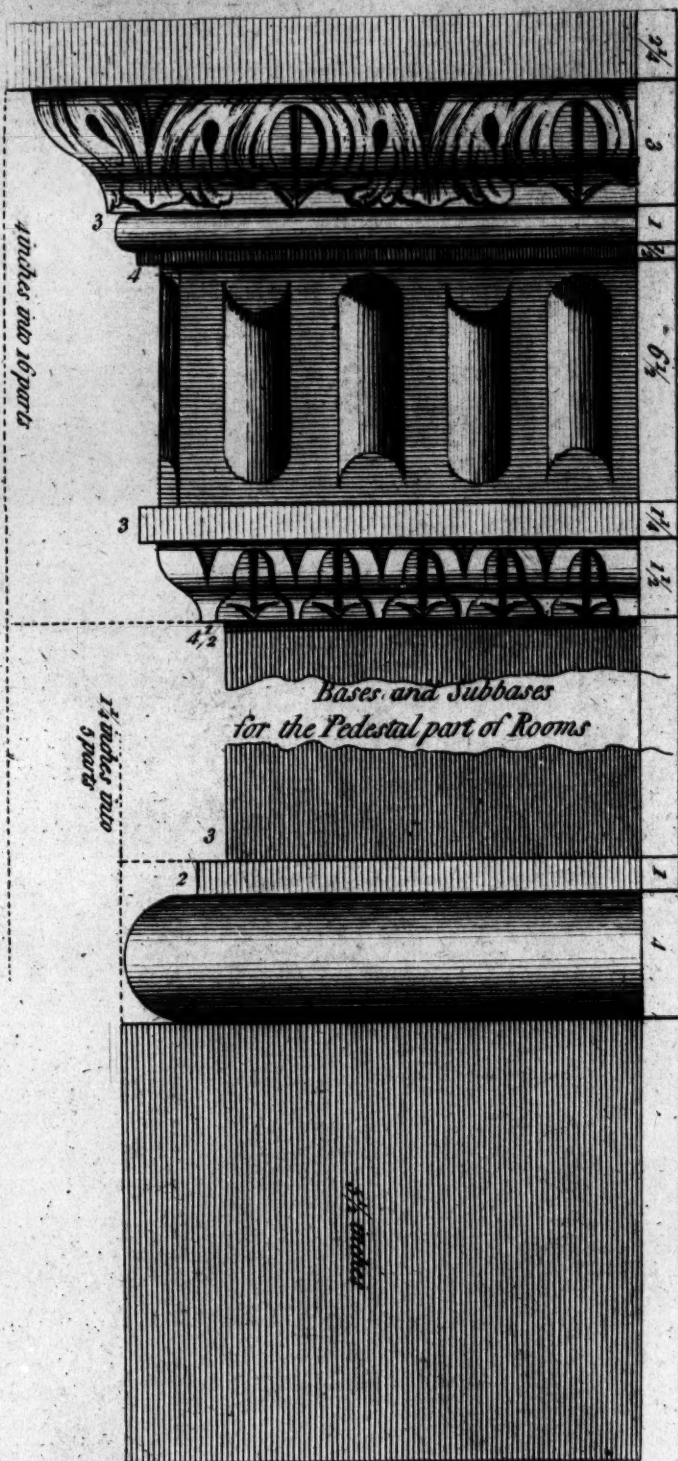
Base & Sub-base for Rooms.











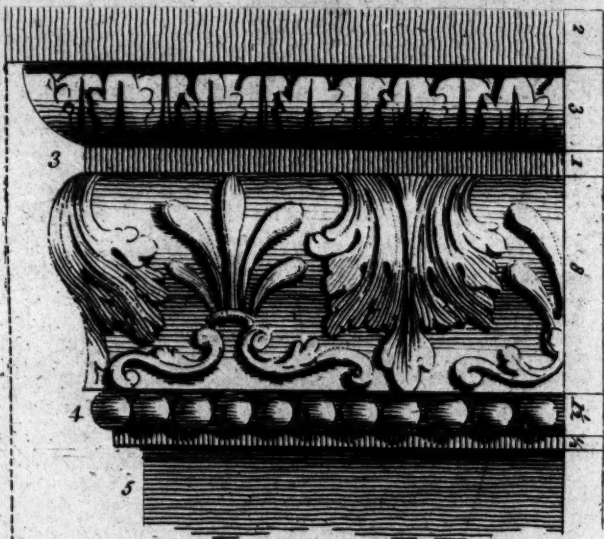
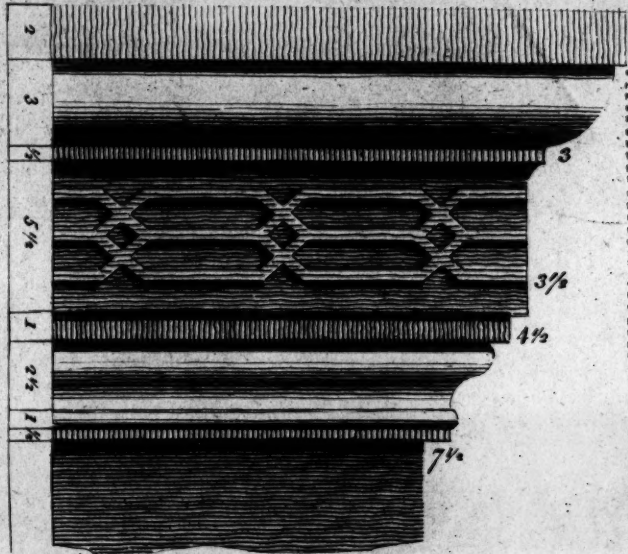
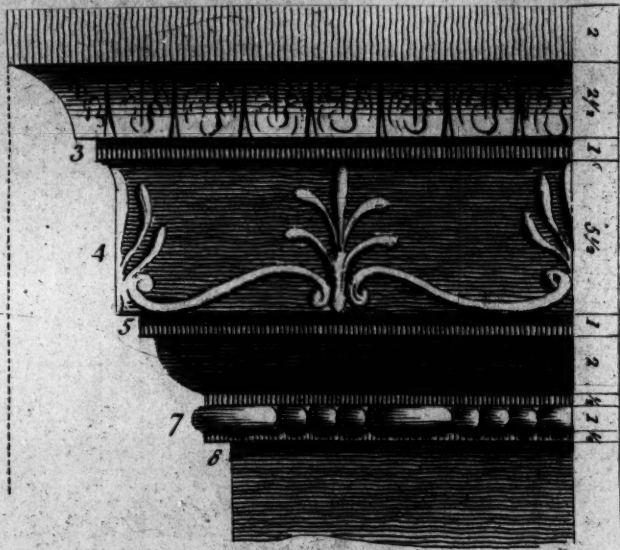




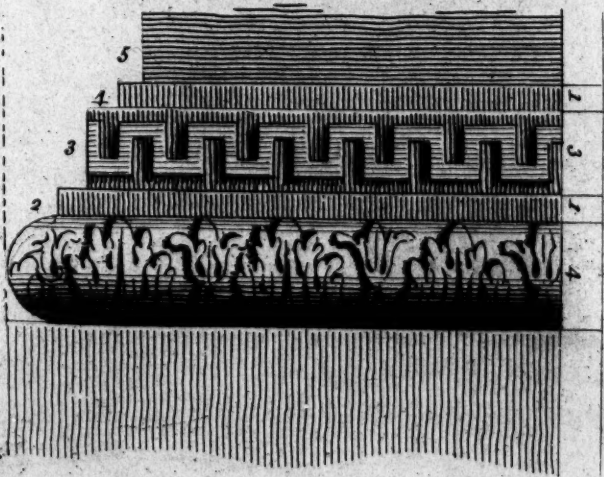
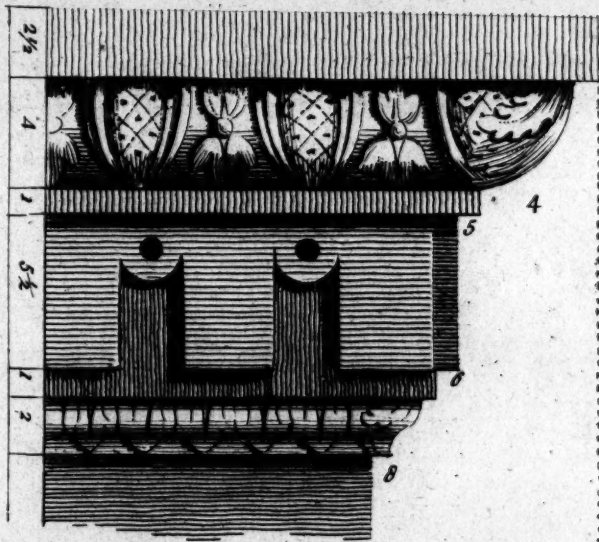


*Bases & Sub-bases for Rooms.*

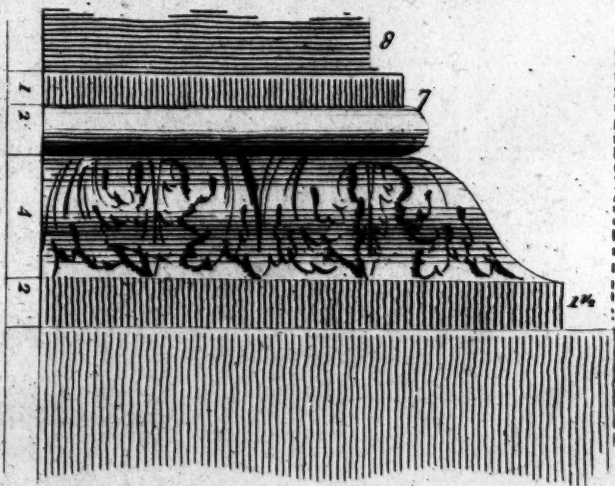
*Plate LVI.*



*4 inches into 16 parts*



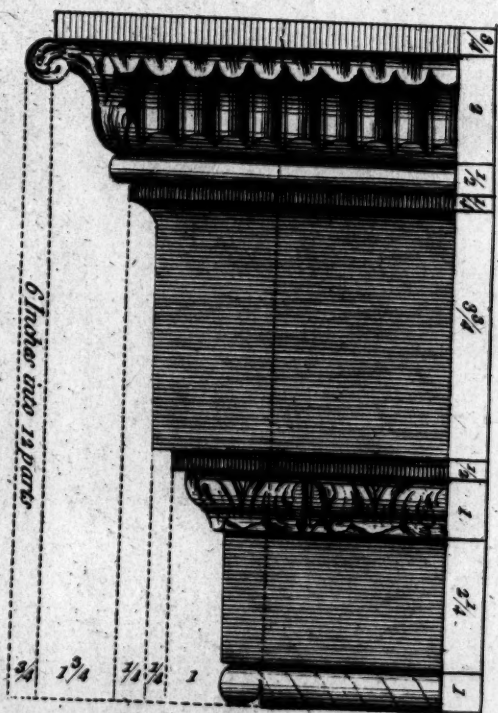
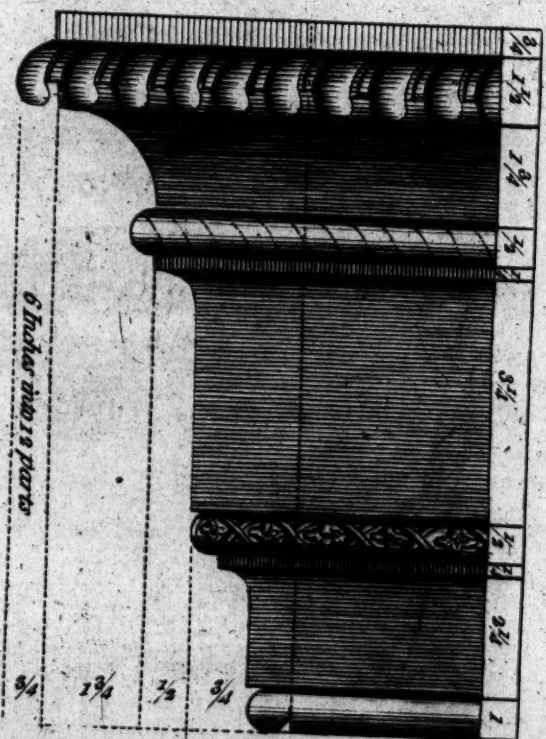
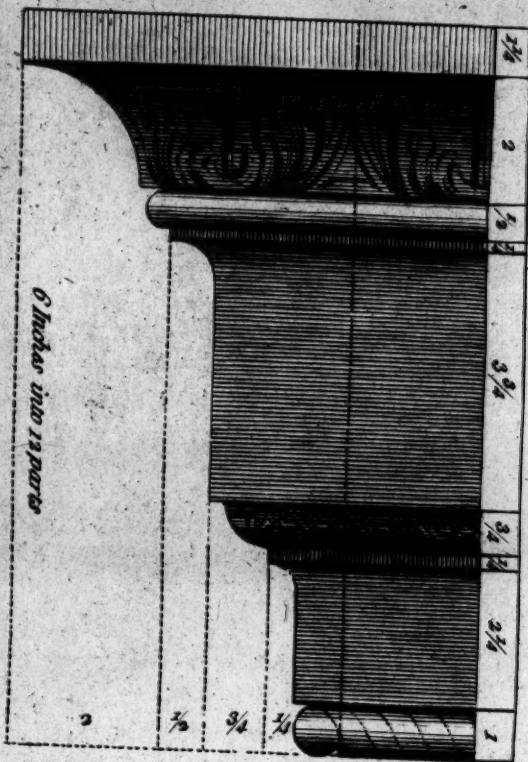
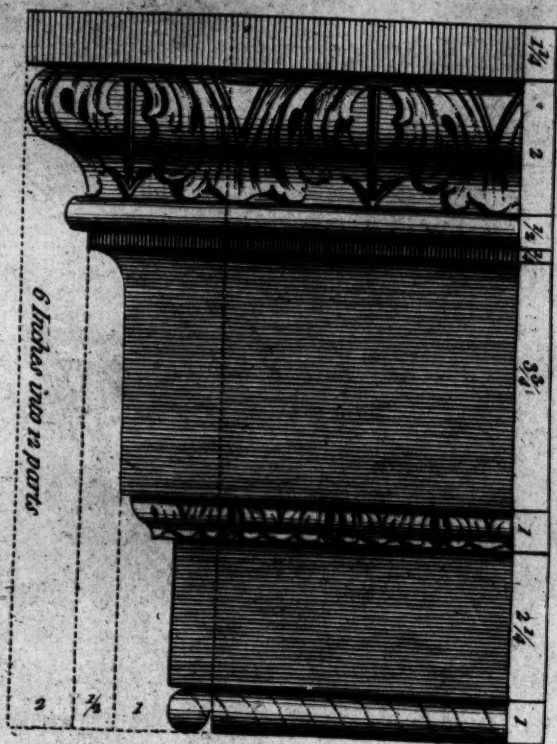
*2 1/4 inches into 9 parts  
2 inches ditto*









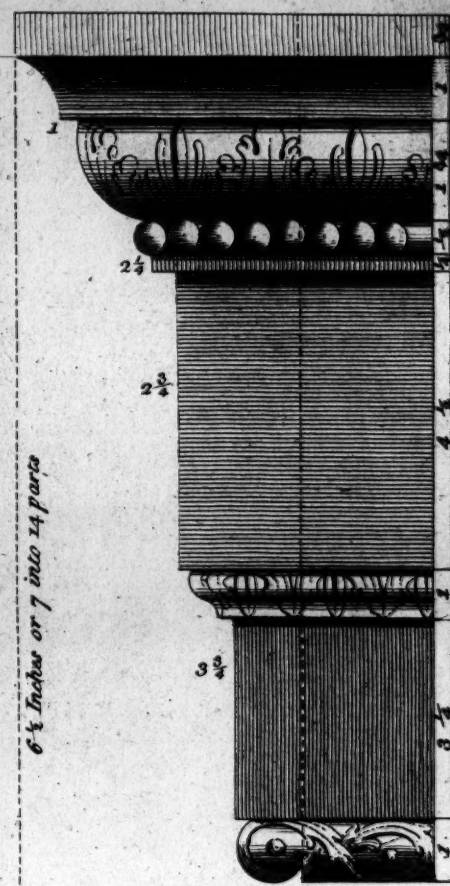
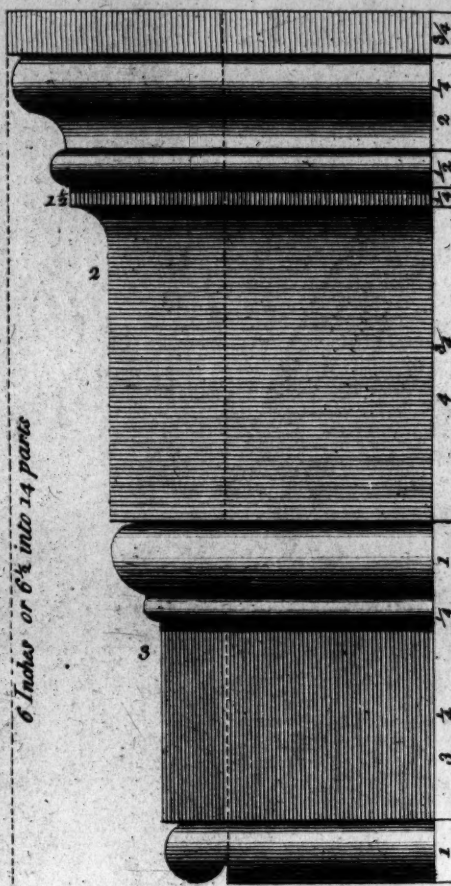
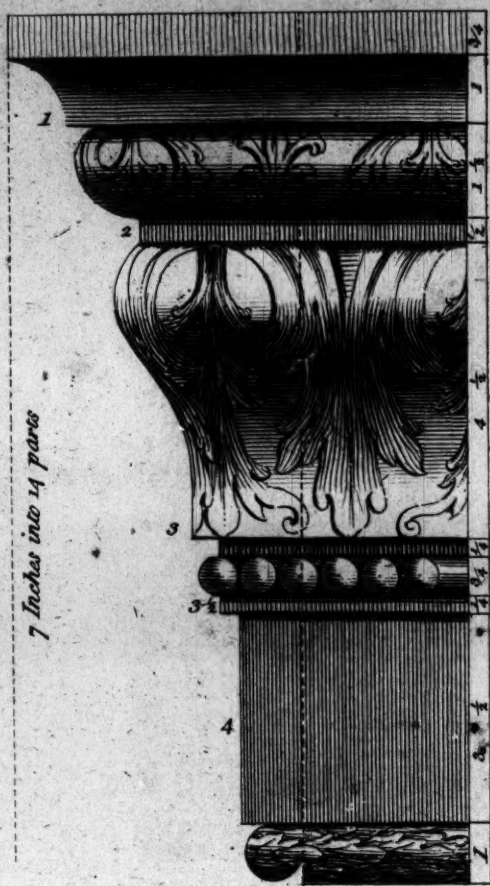


Architraves for Doors Windows &c. at large.

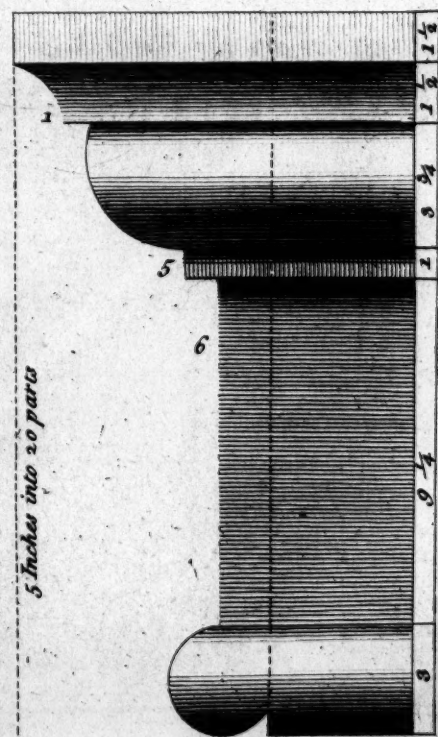
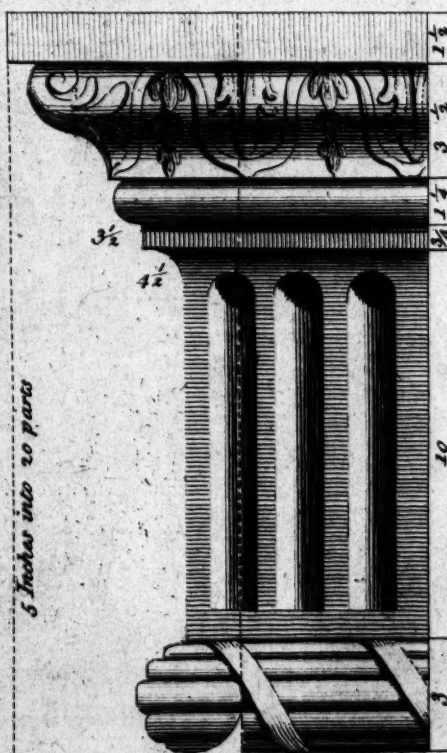
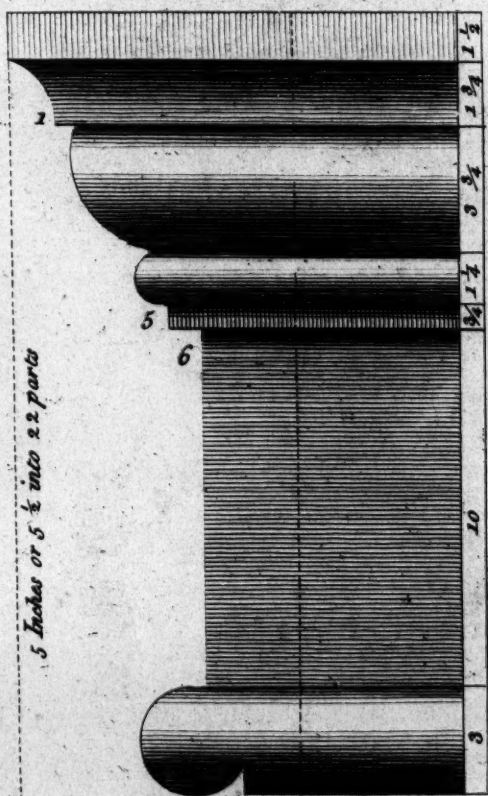








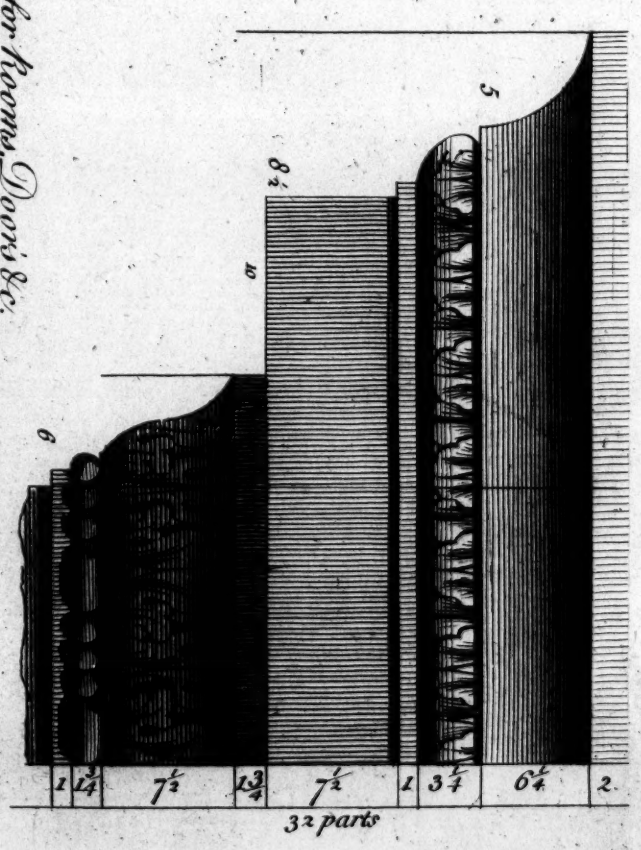
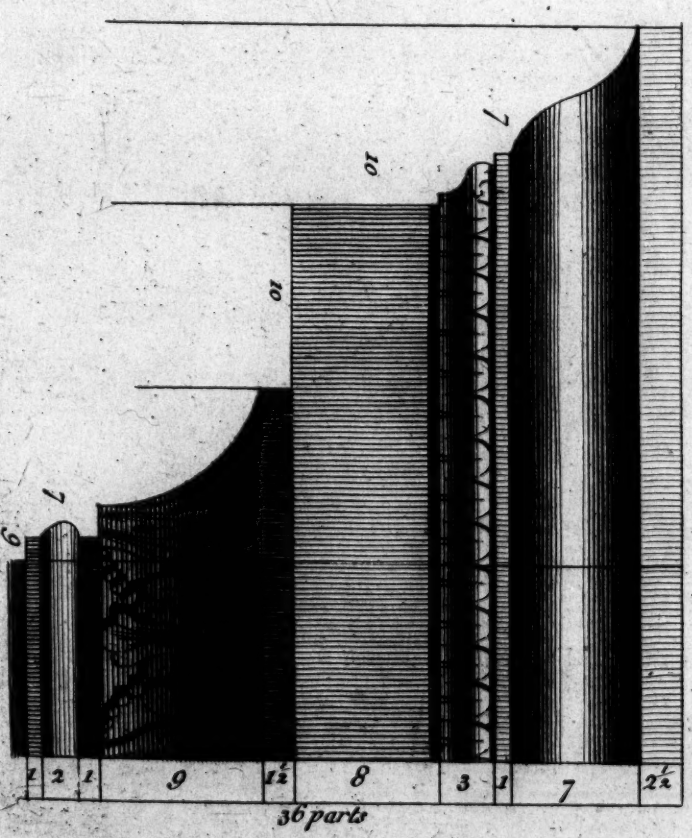
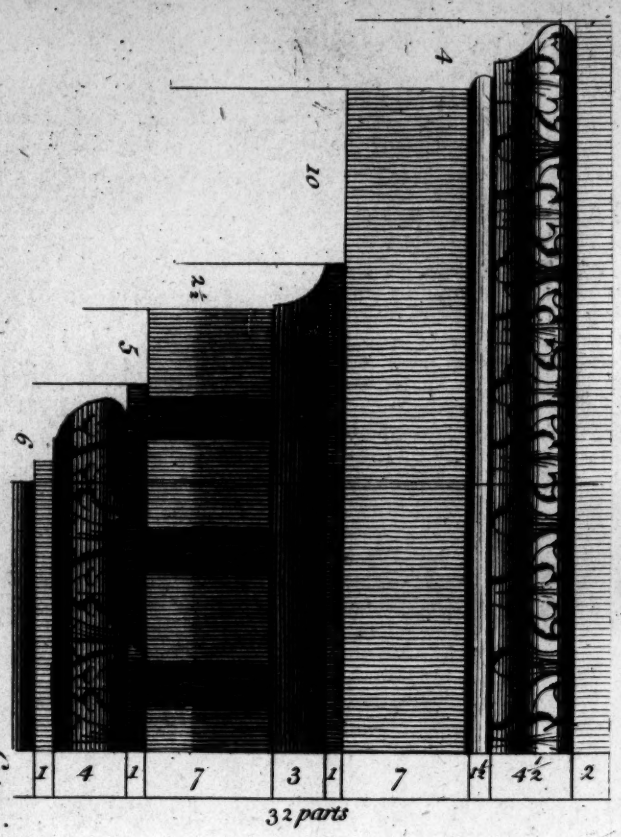
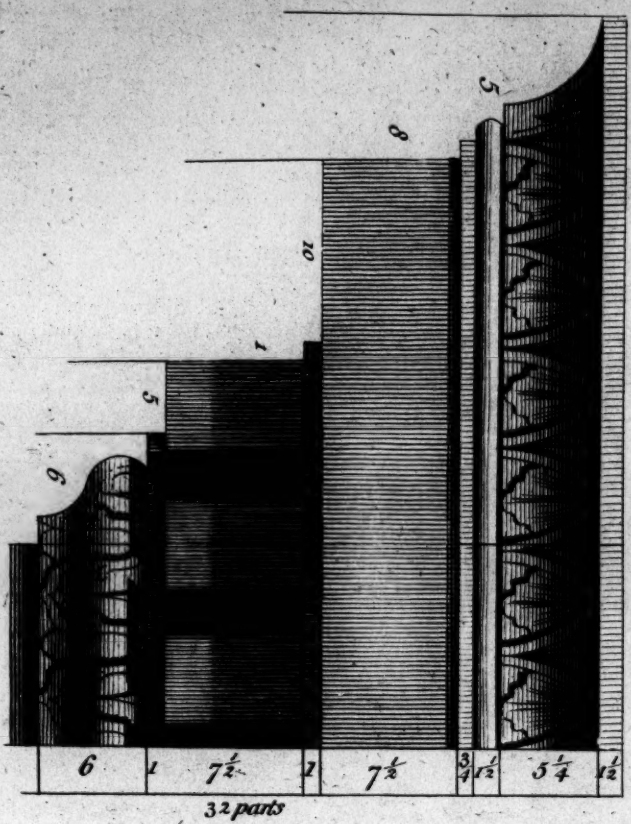
Architraves for Doors Windows &c.









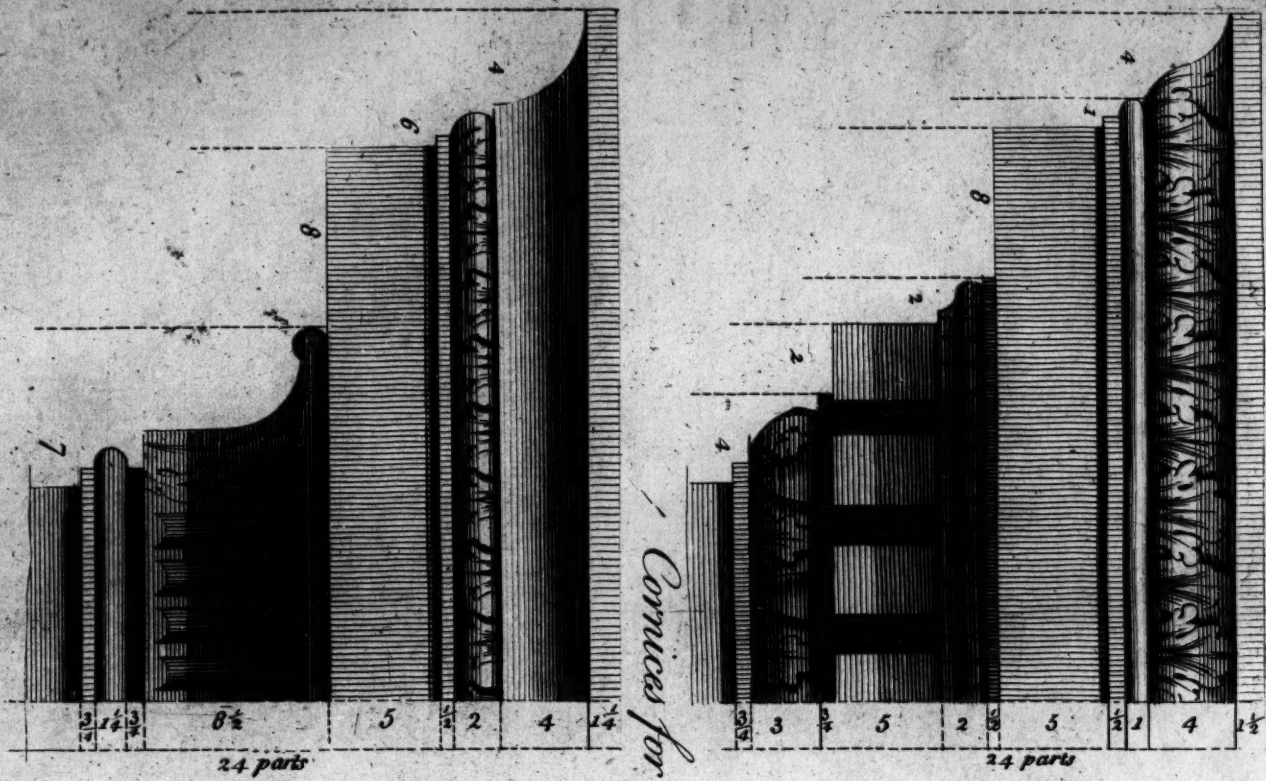


Dimensions for Rooms, Doors &c.

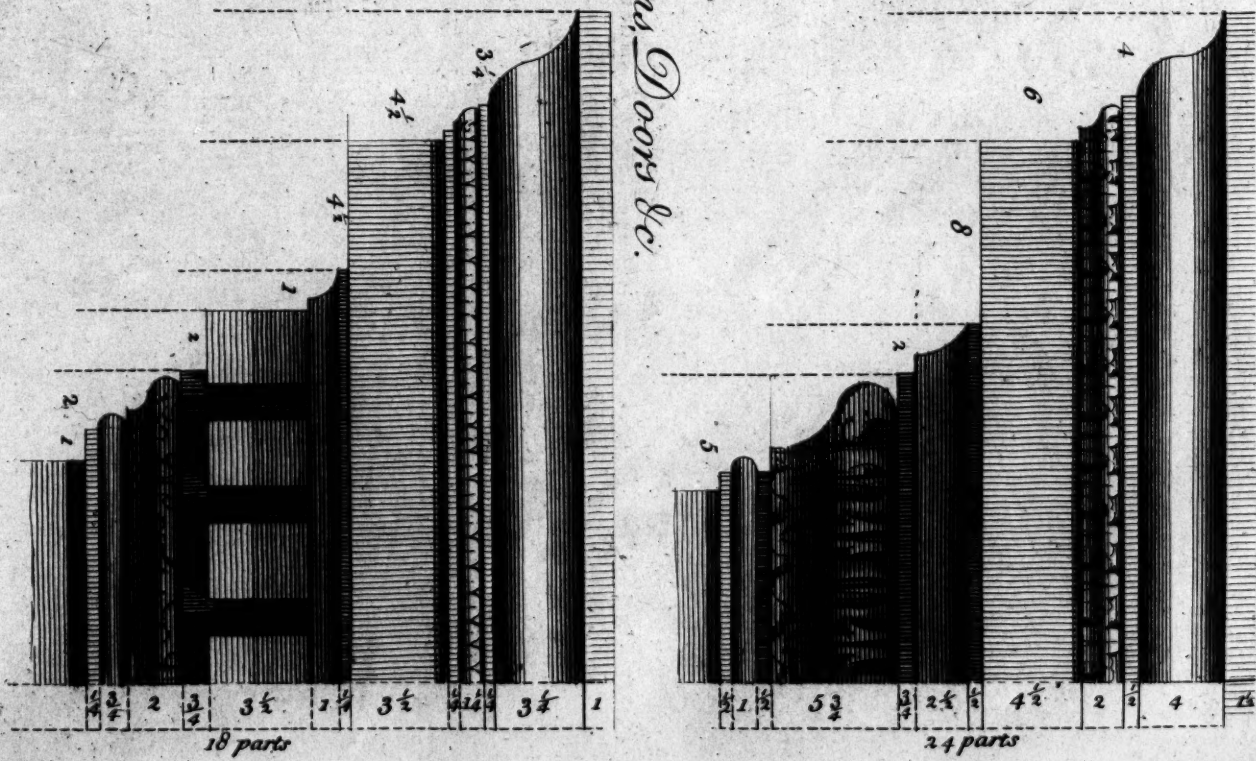








For Rooms 18 part of the whole height. For Doors from 6 to 7 inches.  
For Chimneys from 4 inches to 4 ½.



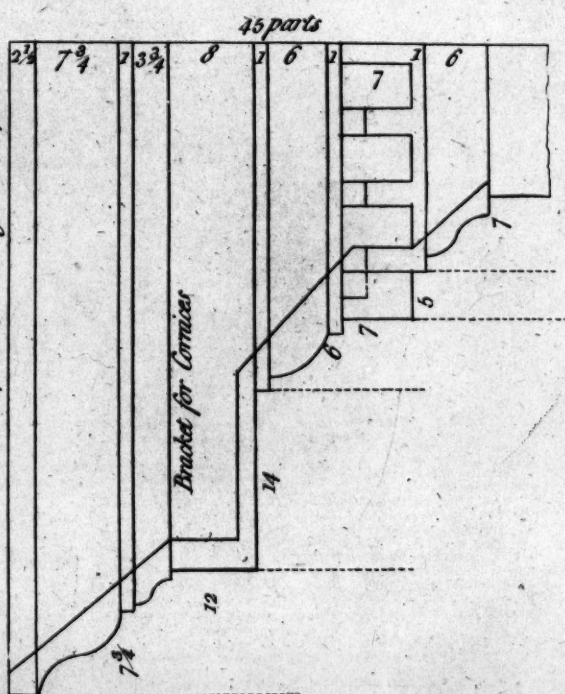




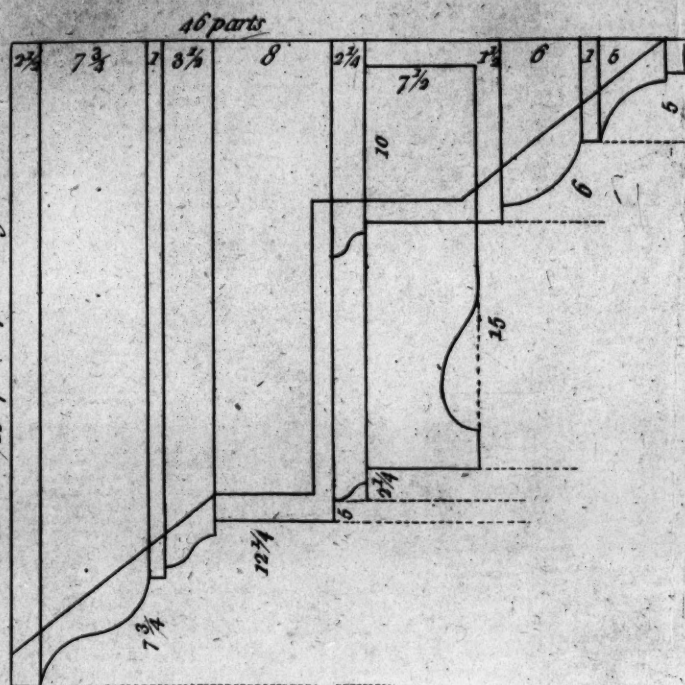


Comices for Rooms &c.

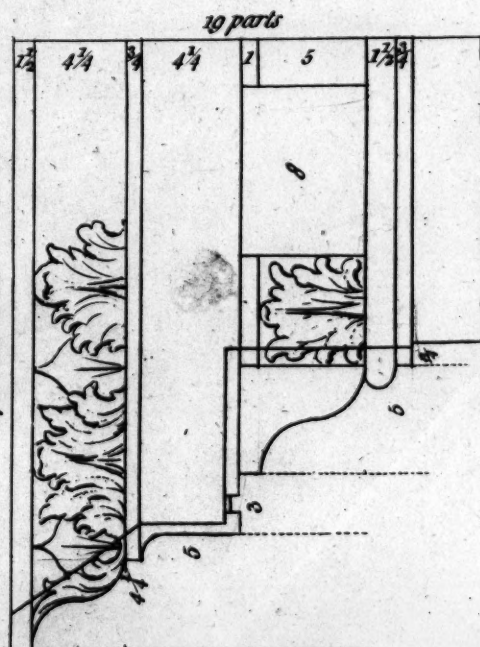
*Cornices  $\frac{1}{16}^{\text{th}}$  part of the Height. or  $\frac{1}{18}$  part*



*Cornices  $\frac{1}{16}^{\text{th}}$  part of the Height.*



*Cornices  $\frac{1}{16}$ . or  $\frac{1}{18}$ .<sup>th</sup> part of the Height  
for Rooms &c.*

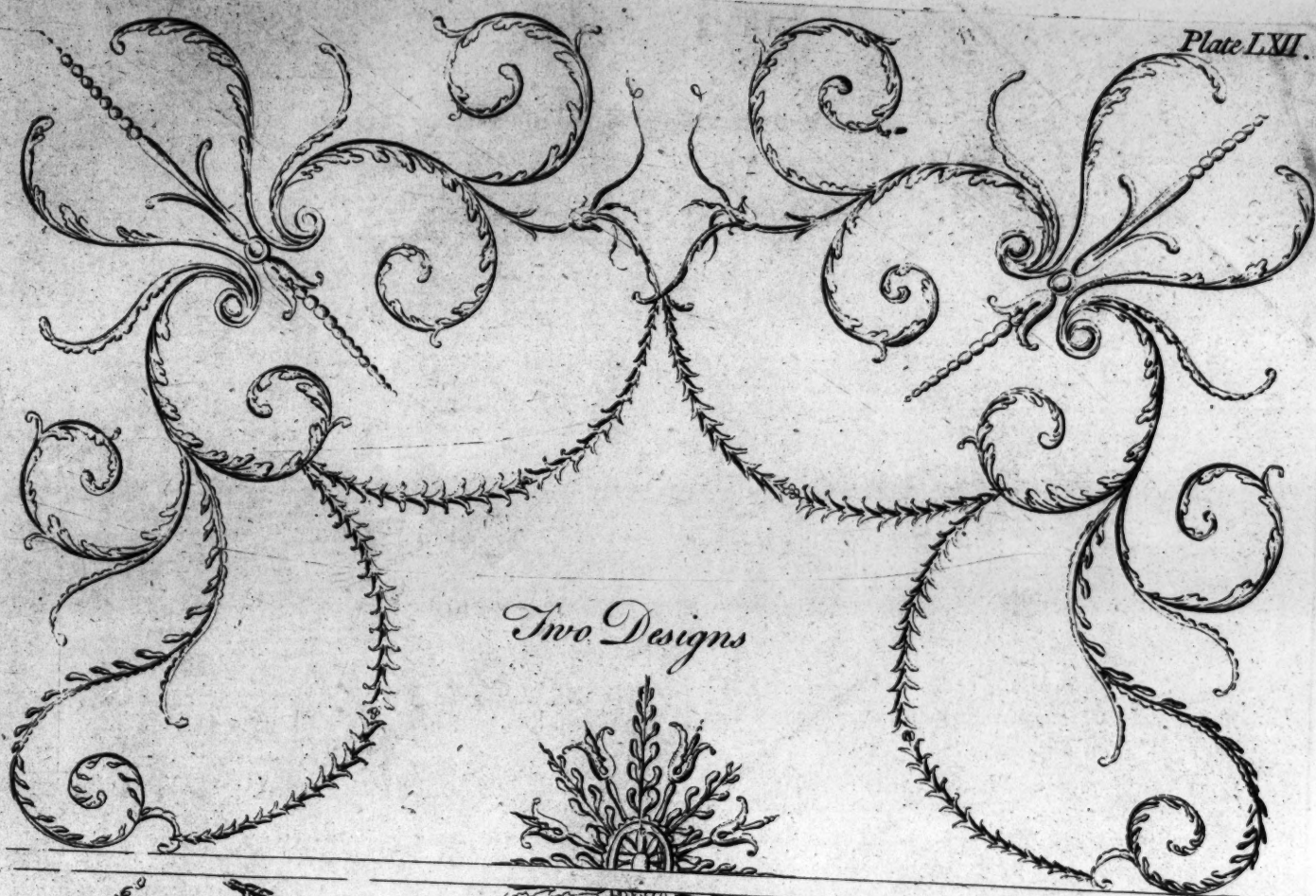


*Plate LXI.*

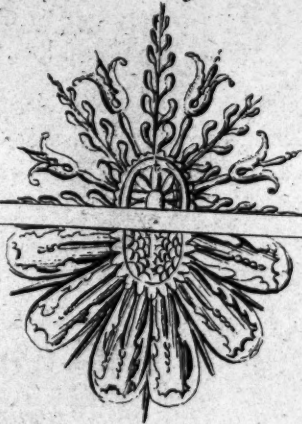




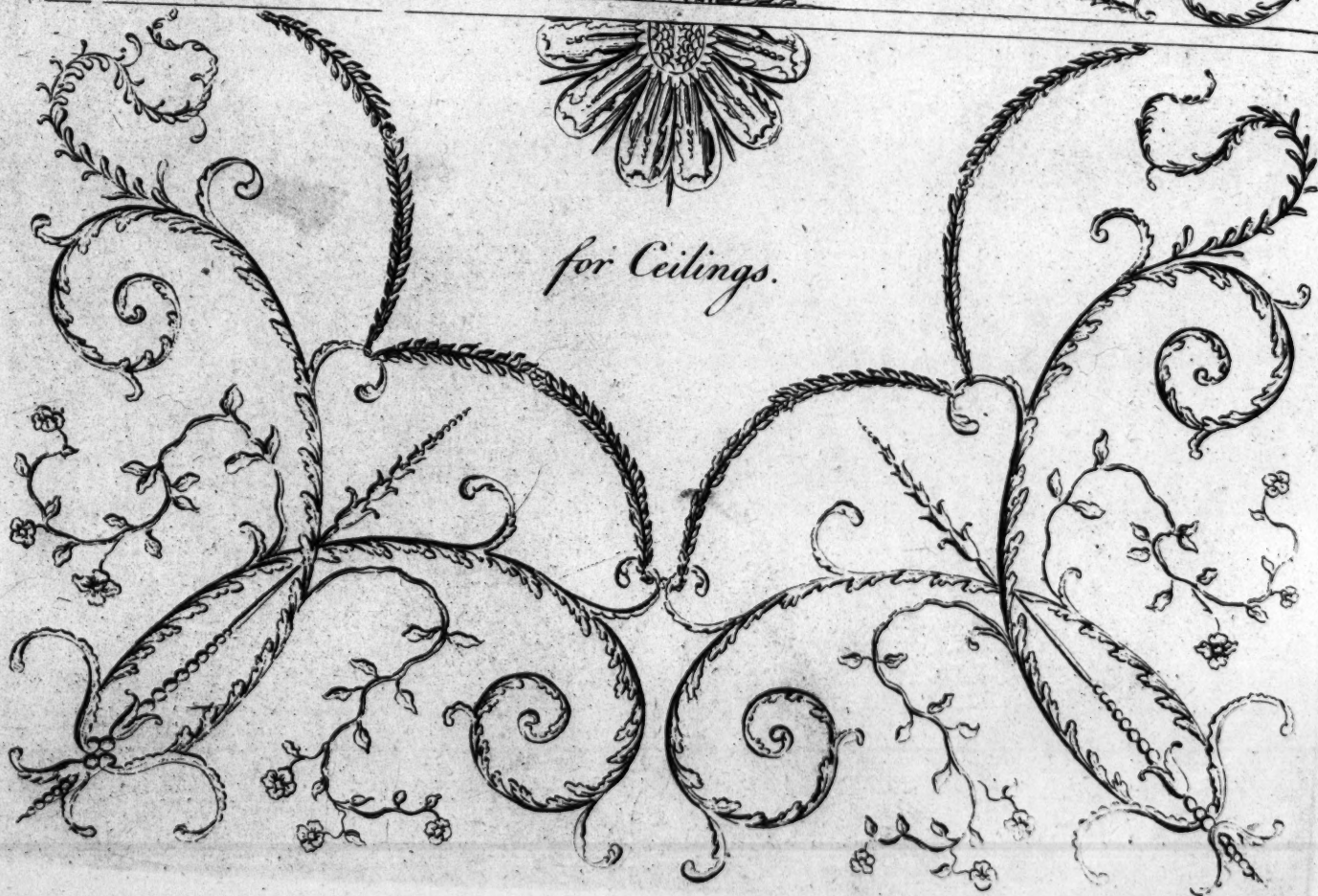




*Two Designs*



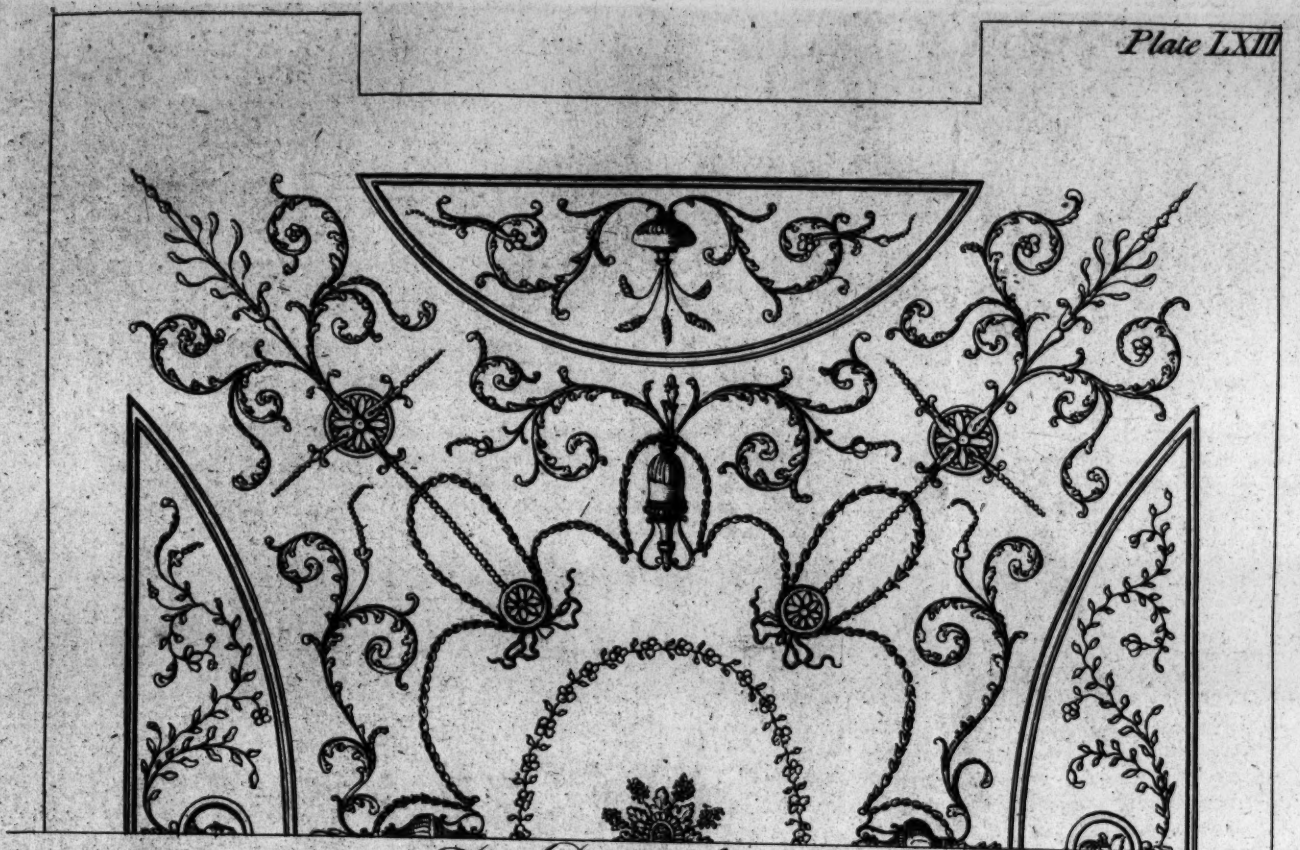
*for Ceilings.*











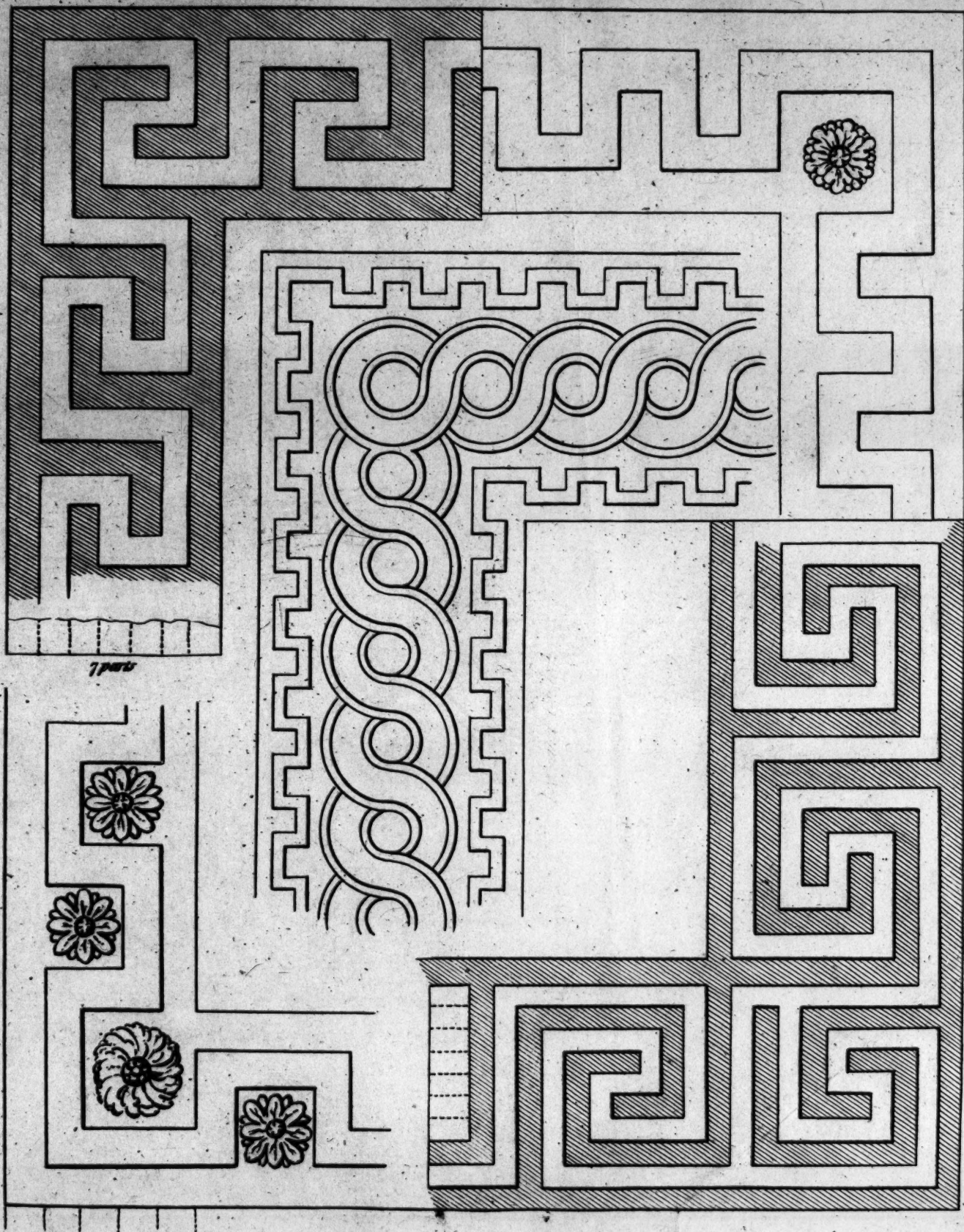
*Two Designs for Ceilings.*











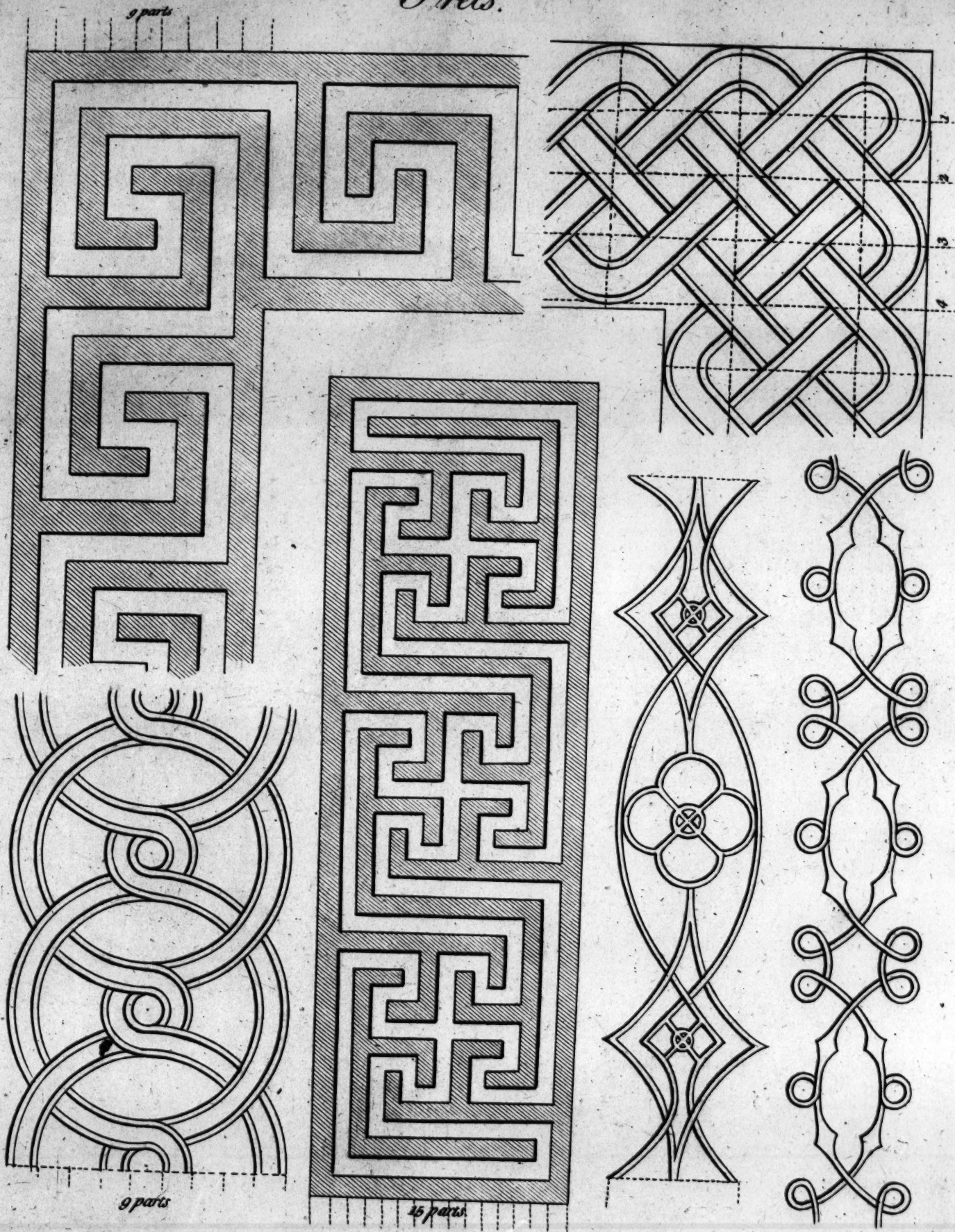






*Frets.*

*Plate LXV.*

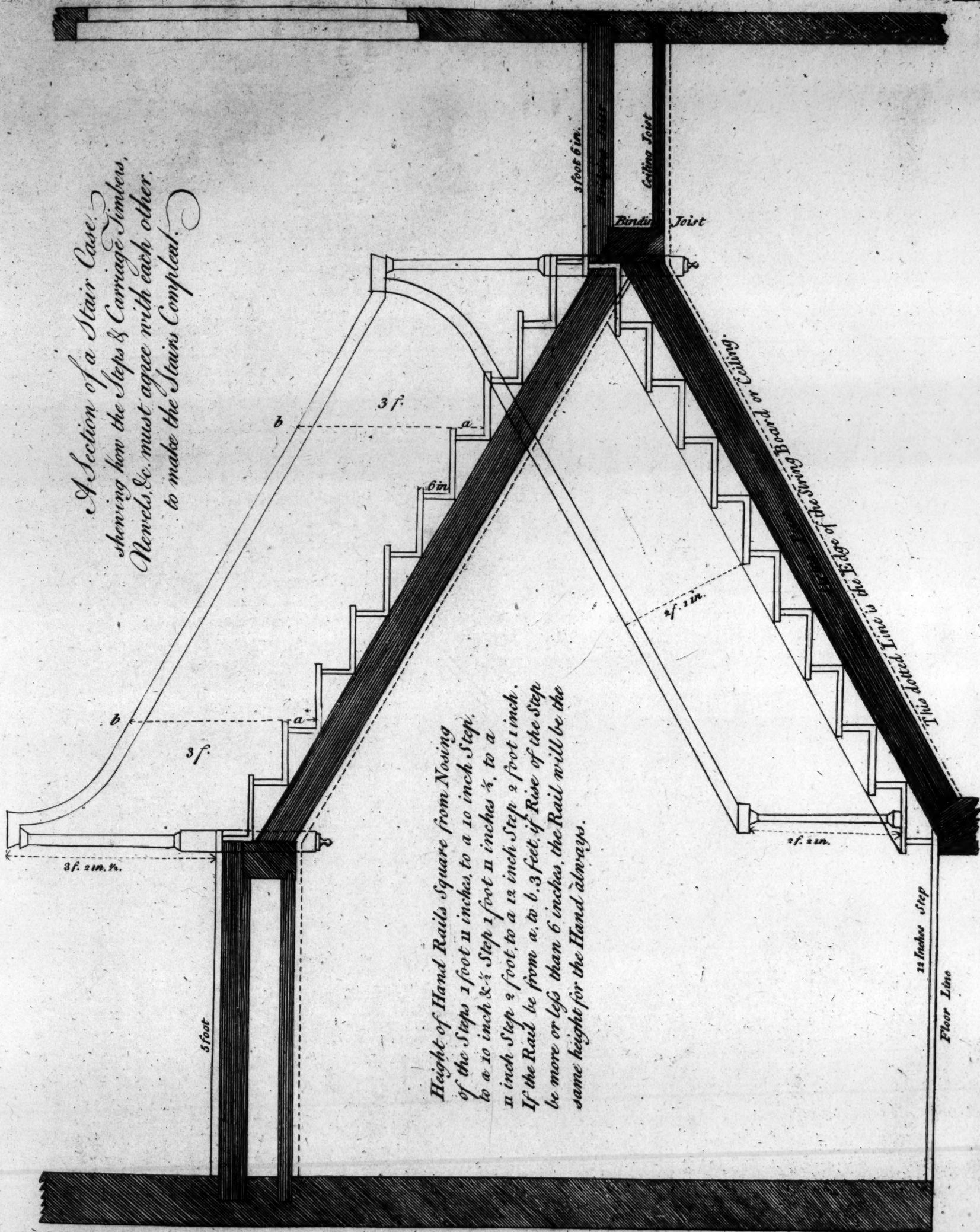








*A Section of a Stair Case,  
showing how the Steps & Carriage Timbers,  
Newels, &c. must agree with each other,  
to make the Stairs Compliant.*



*Height of Hand Rails Square from Nosing  
of the Steps 1 foot 11 inches, to a 10 inch Step,  
to a 10 inch & 1/2 Step 1 foot 11 inches 1/2, to a  
11 inch Step 2 foot, to a 12 inch Step 2 foot 1 inch.  
If the Rail be from a, to b, 3 feet, if Rise of the Step  
be more or less than 6 inches, the Rail will be the  
same height for the Hand always.*

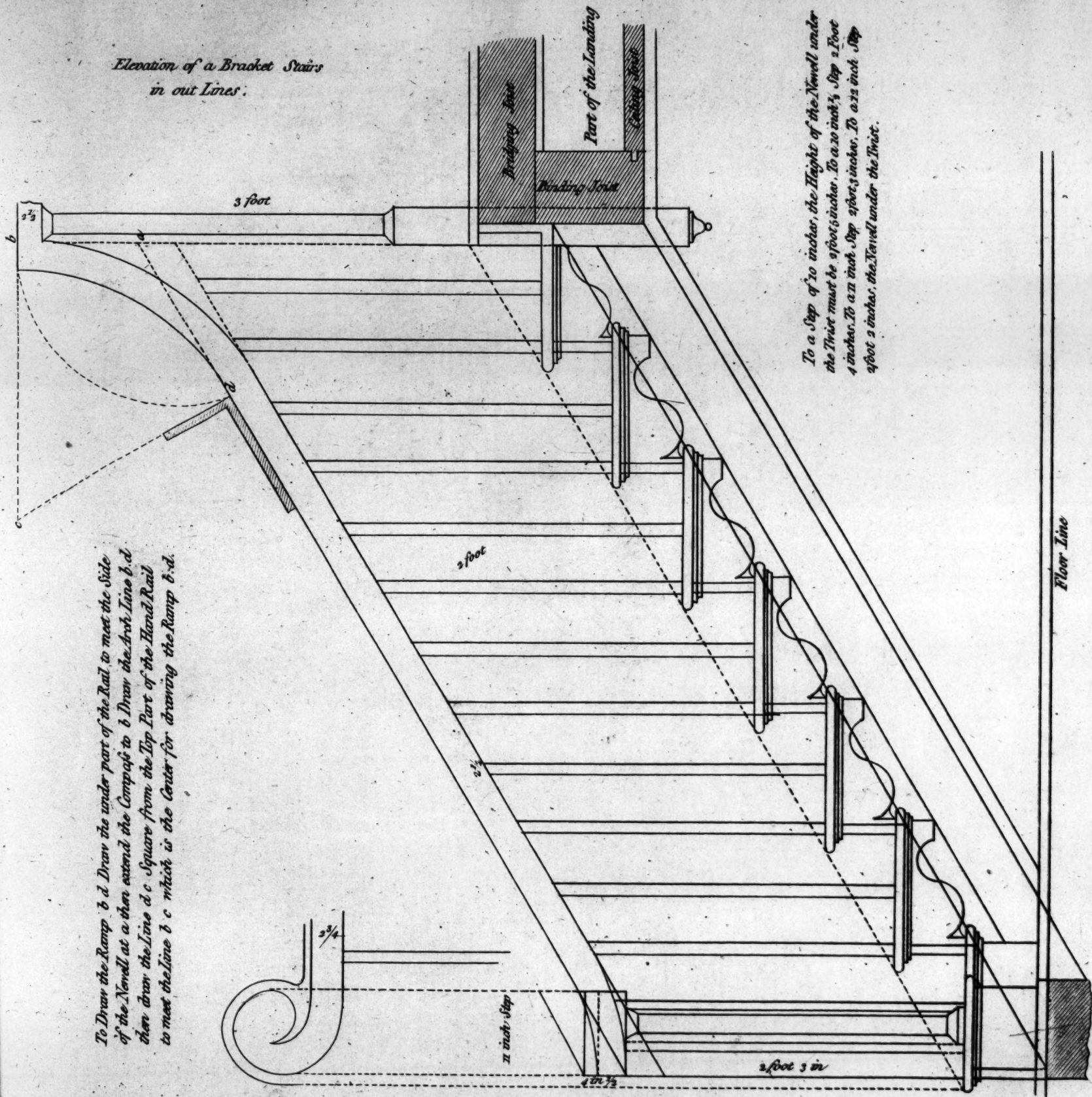
*Building Carriage  
of the Nosing  
This dotted line shows the edge of the Nosing*







Elevation of a Bracket Stairs  
in out Lines.



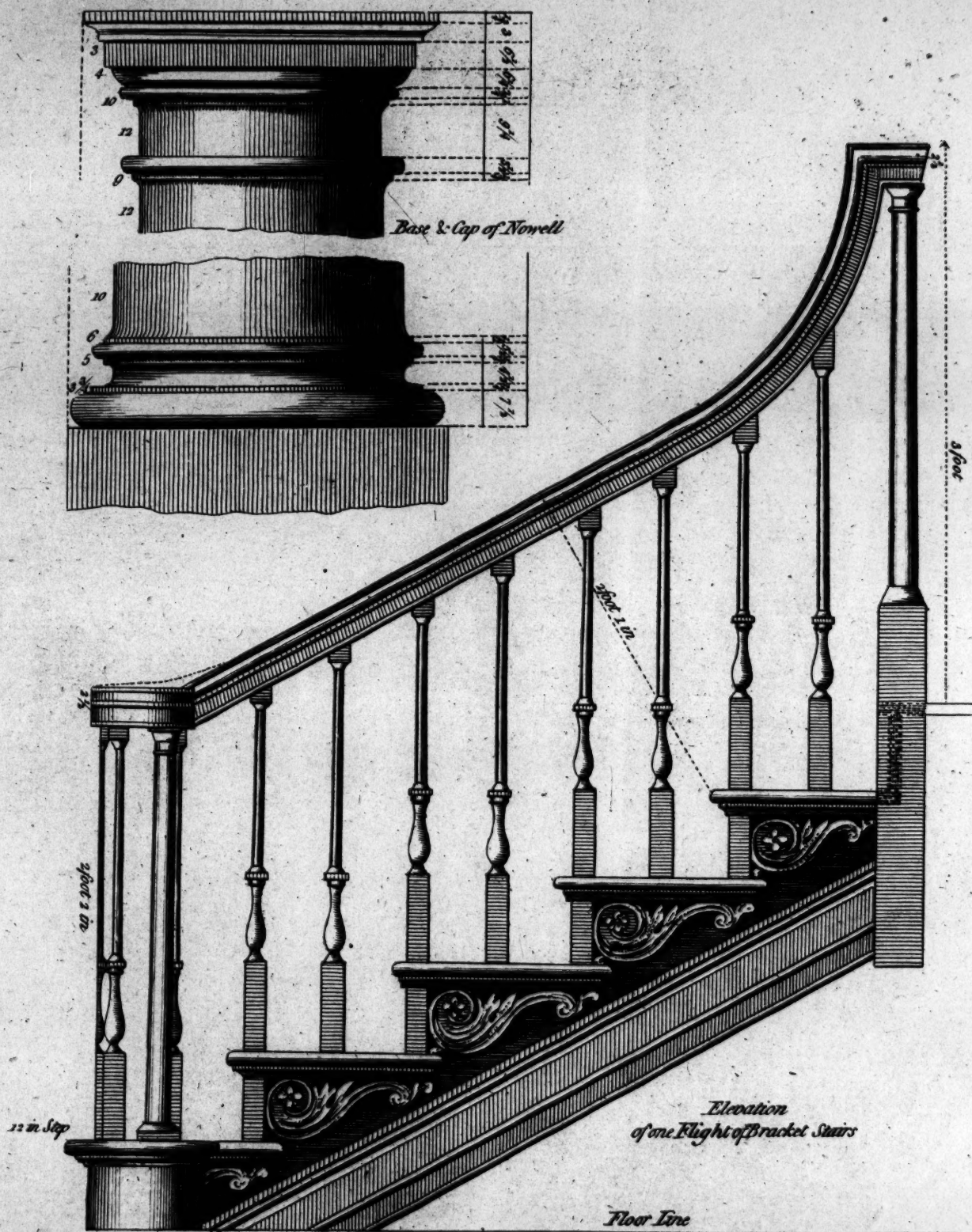
To Draw the Ramp b d Draw the under part of the Rail to meet the Side of the Newell at a then extend the Compass to b Draw the Arch Line b d then draw the Line d c Square from the Top Part of the Hand Rail to meet the Line b c which is the Center for drawing the Ramp b d.

To a Step of 10 inches, the Height of the Newell under the Twist must be 9 foot 5 inches. To a 10 inch 1/2 Step 2 Foot 4 inches. To a 12 inch Step 2 foot 3 inches. To a 12 inch Step 2 foot 2 inches, the Newell under the Twist.



















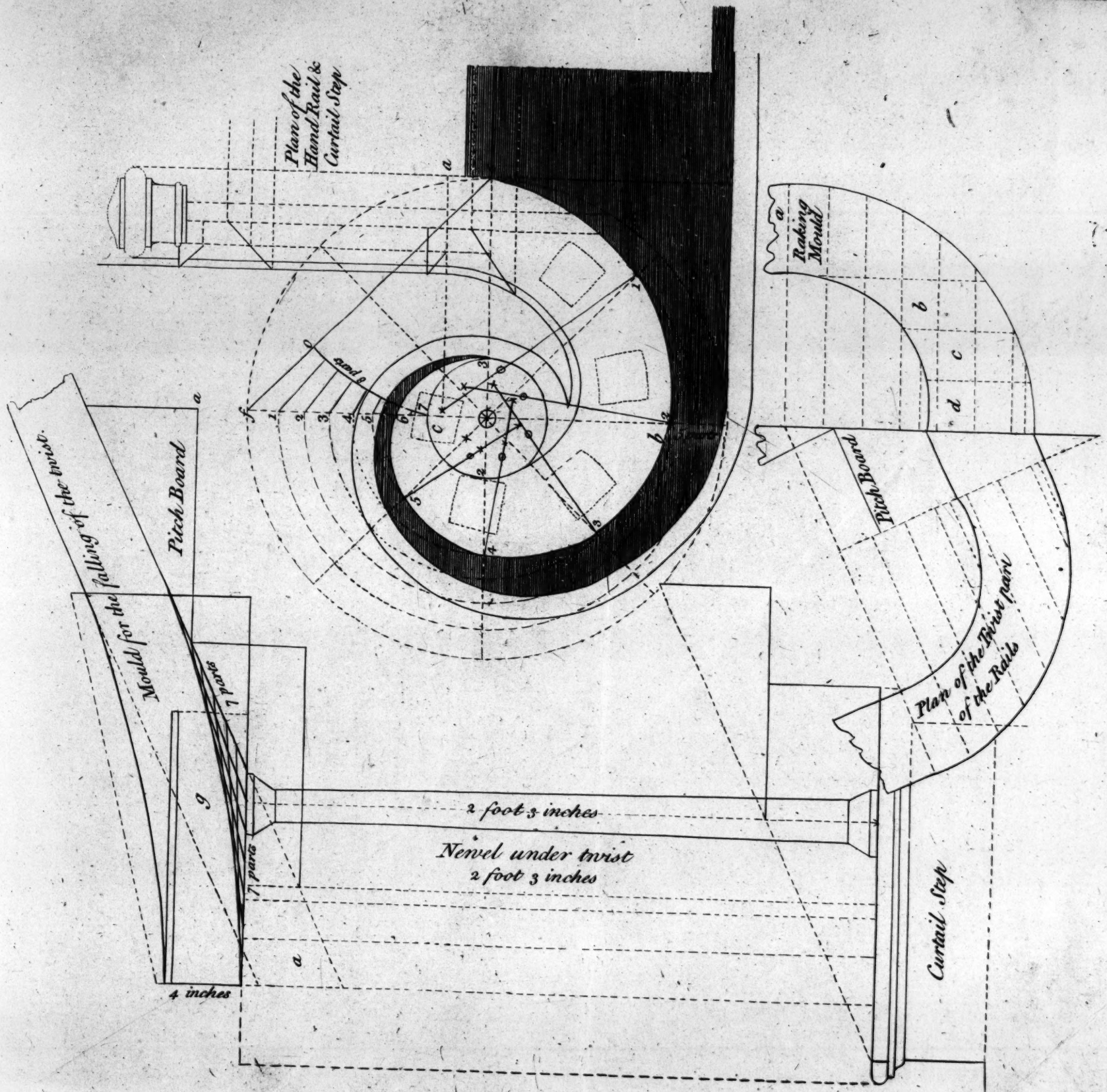
To Face *P L A T E* LXIX.

To Draw the Plan and Scroll of a Twist Rail for a Stair-case.

**D**RAW a Circle equal to the Breadth of two Steps, and divide it into eight Parts, then draw a Circle round the Centre five Inches Diameter, as 2, 3, then draw the Line *ef*, and set one Foot of the Compass at *e*, and draw the Arch Line 7, 0, which must be divided into eight Parts, and draw Lines from *e*, thro' each eighth Part to the Line 1, 2, 3, 4, 5, &c. then set the Compass in the Centre of the Scroll, and draw the dotted Lines from 1 on the Scale to 1 on the Edge of the Rail, and from 2 to 2 on the Edge of the Rail, and so for all the Rest to each eighth Part of the Circle, which gives the outer Edge of the Rail.

To find the Centre for drawing each eighth Part, set one Foot of the Compass in the Centre of the Scroll, and take the Distance to *f*, with the same Radius; set the Foot at *e*, and make a Mark at *c*, and with the same Radius set one Foot at 1 on the Edge of the Rail, and bisect the former Stroke at *c*, which is the Centre for the first eighth Part, then take from the Centre of the Scroll to 1 on the Scale, and one Foot at 1 on the Edge of the Rail, make a Mark in the Eye and move the Compass to 2 on the Edge of the Rail, and bisect the former Stroke; that is the Centre for the second eighth Part, and so on for all the Rest. The Centre for the Front of Riser and Nosing of Step are the black Dots, one fifth Part from the Rail to the Nosing of the Step without the other Centre; the Pieces which make the Twist Part of the Rail are *d*, *c*, *b*, on the raking Mould the Twist begins at *a* on the Edge of the Rail, and ends at three on ditto, the remaining Part is level; the lower Part of the Scroll from 2 is cut out of a parallel Piece, as represented by *g* on the Newel, &c.

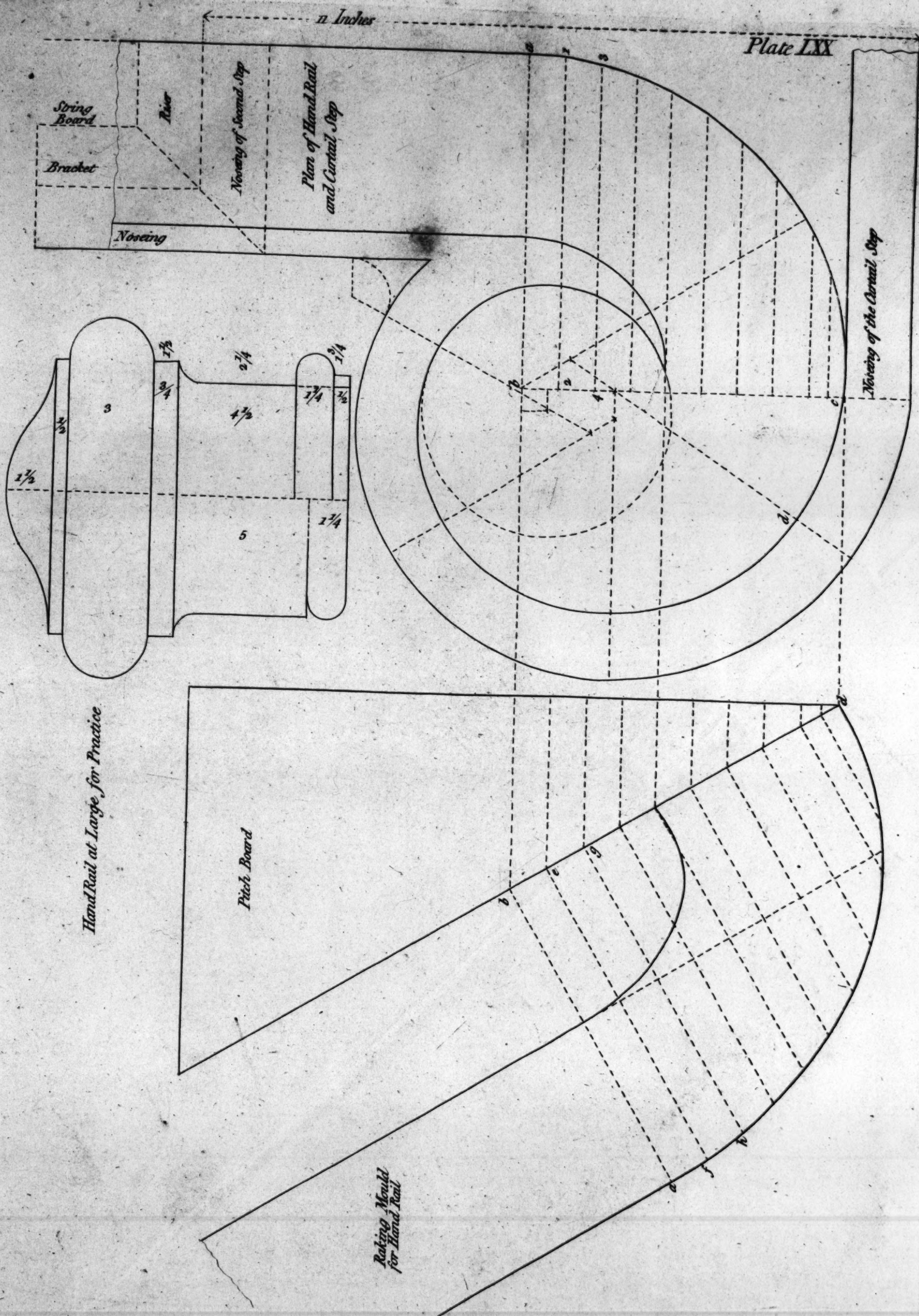








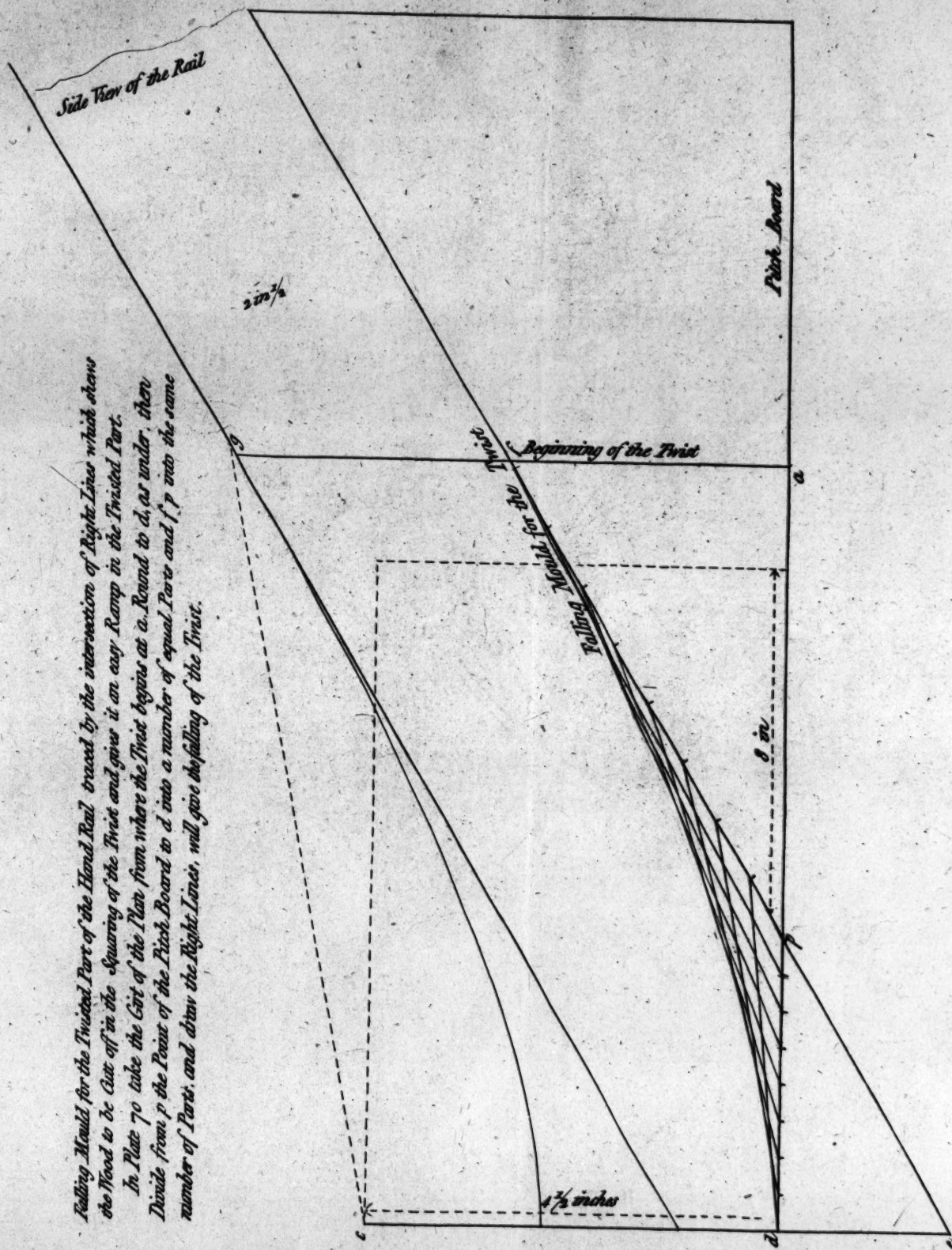










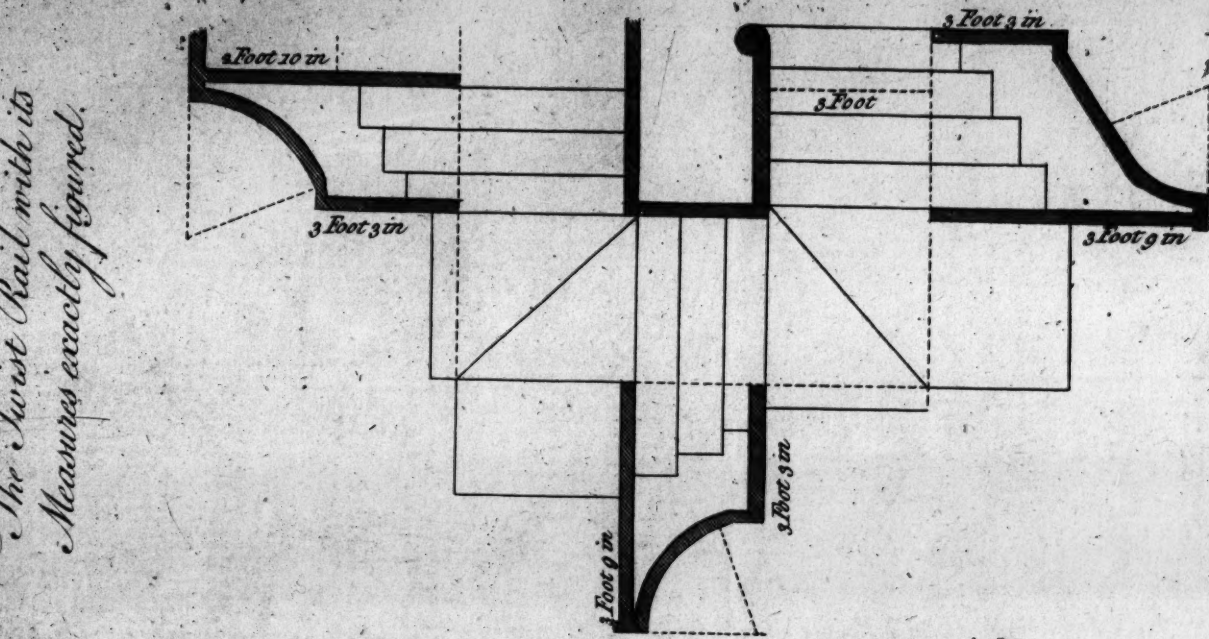




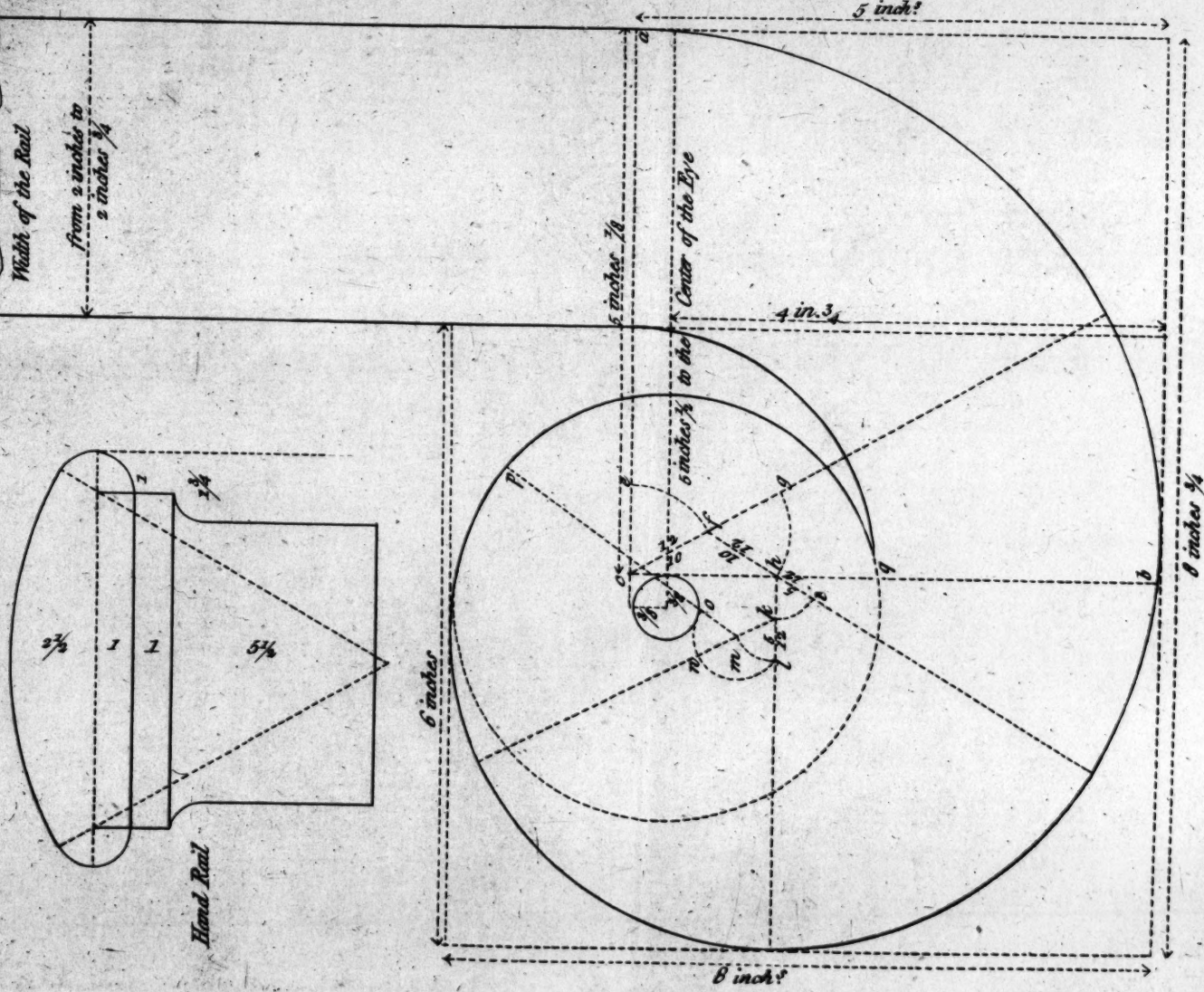




*The Twist Rail with its  
Measures exactly figured.*



*Plate LXXII.*



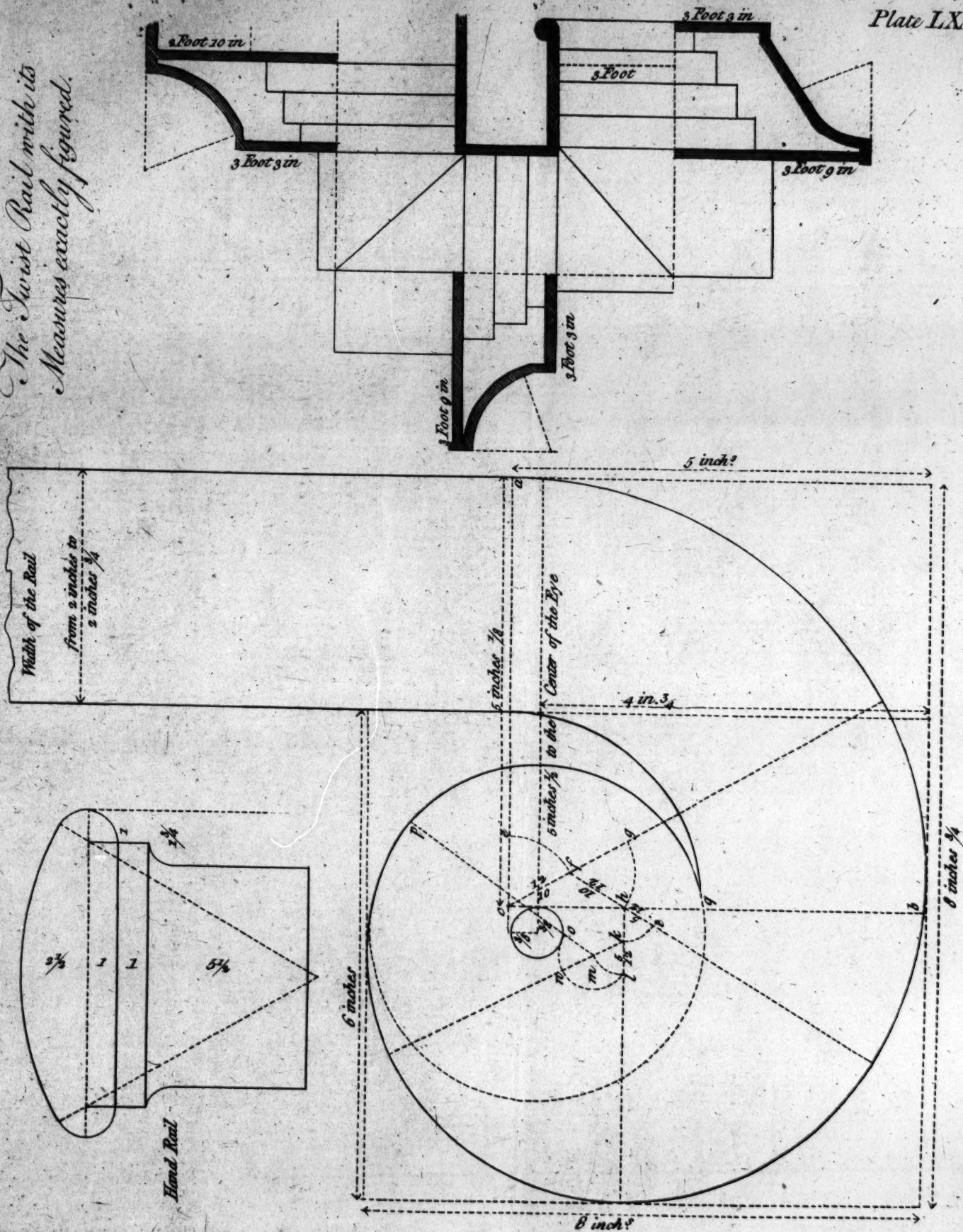






The Twist Rail with its Measures exactly figured.

*Plate LXXII.*

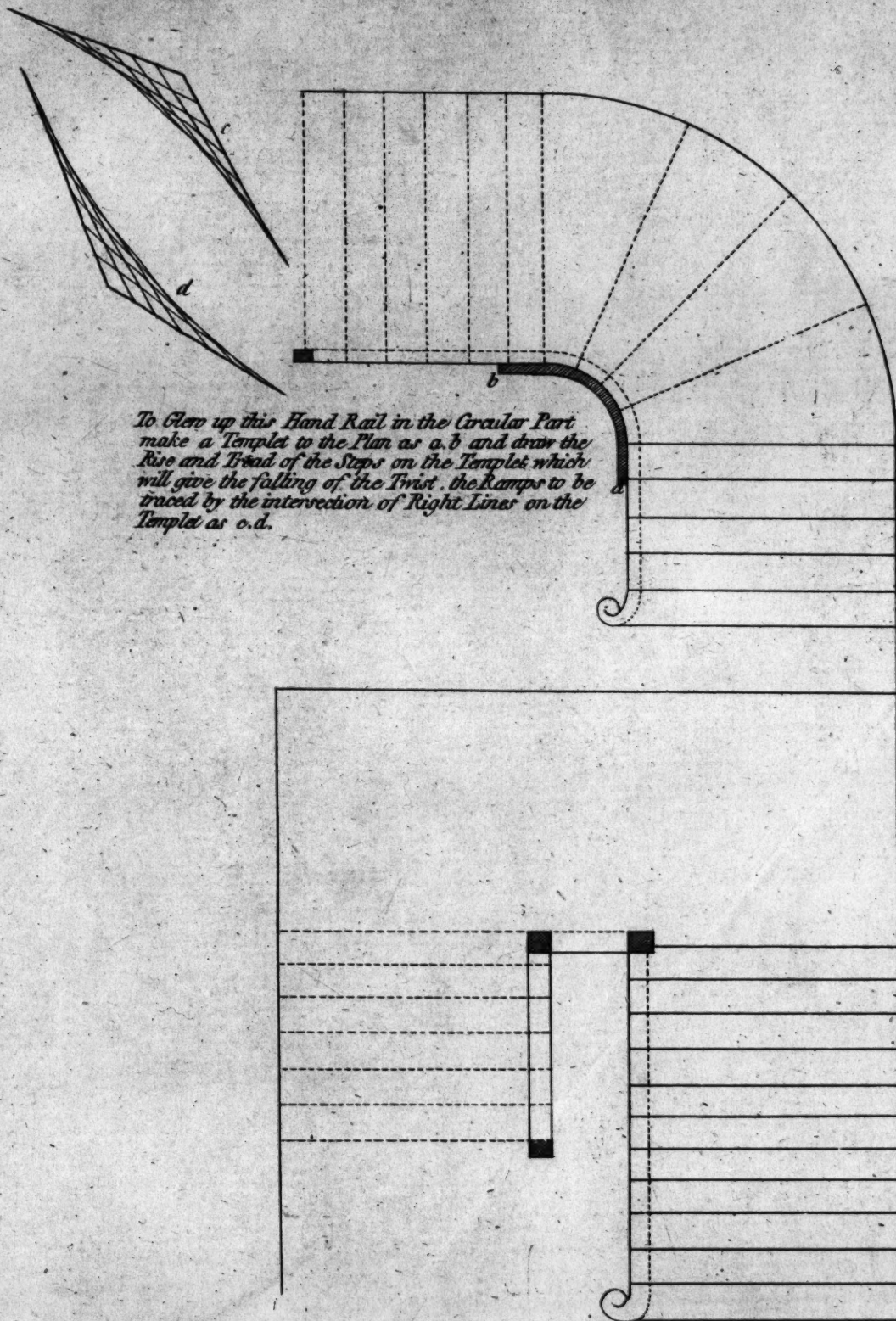




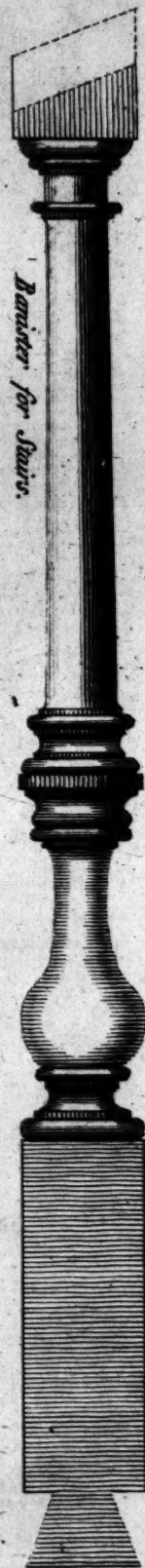




Two Plans for Stair Cases.



To Glue up this Hand Rail in the Circular Part make a Templet to the Plan as a. b and draw the Rise and Bread of the Steps on the Templet which will give the falling of the Twist, the Ramps to be traced by the intersection of Right Lines on the Templet as c. d.

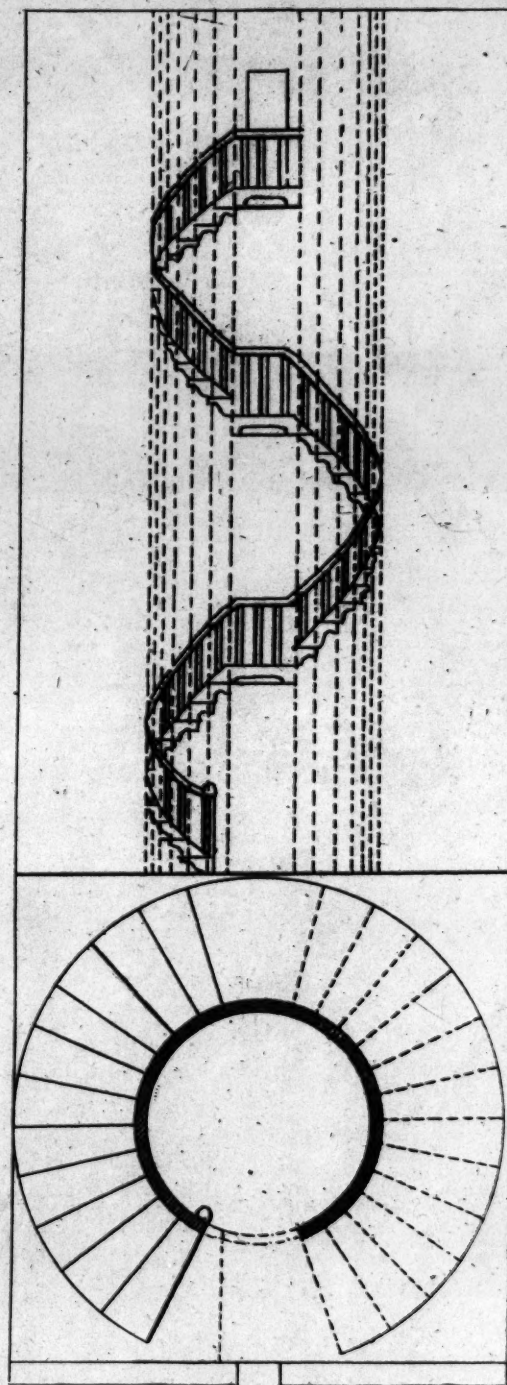
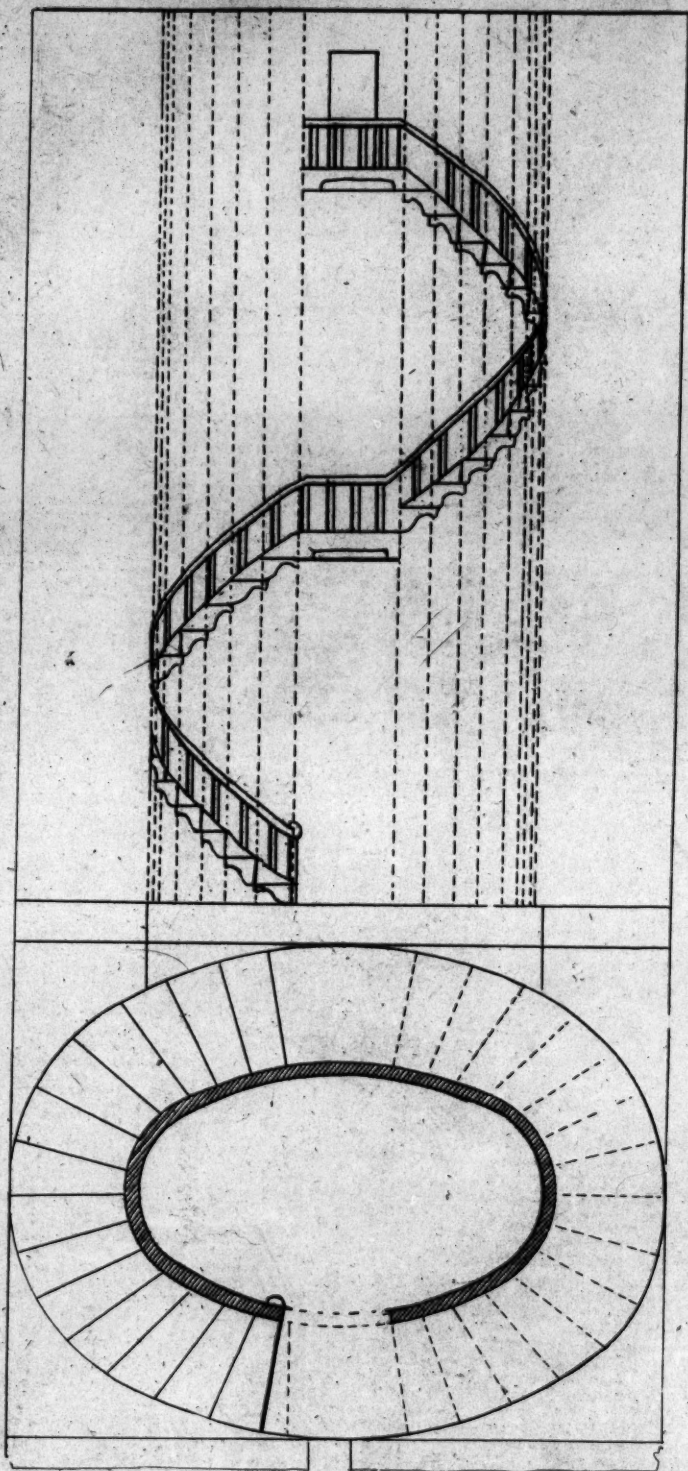








*Plan & Elevation of a Circular & Oval Stair Case. Plate LXXIV.*



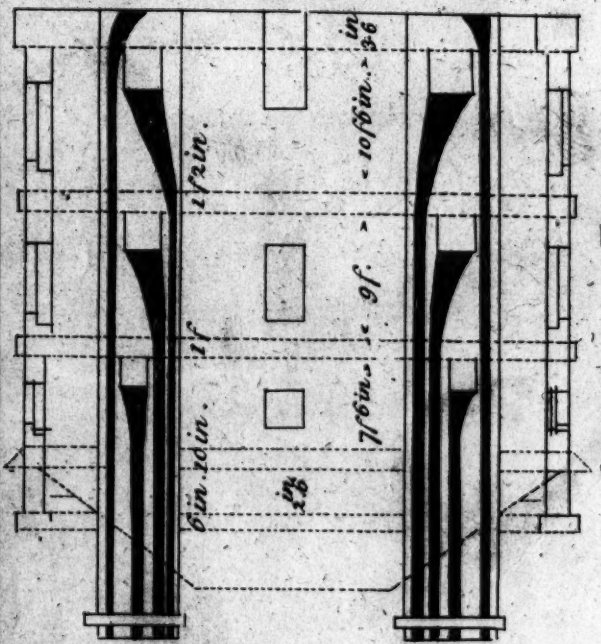
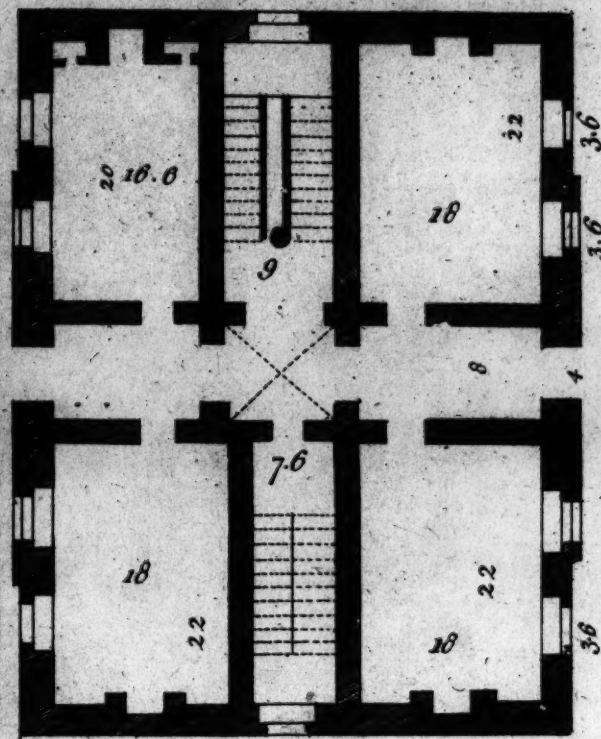
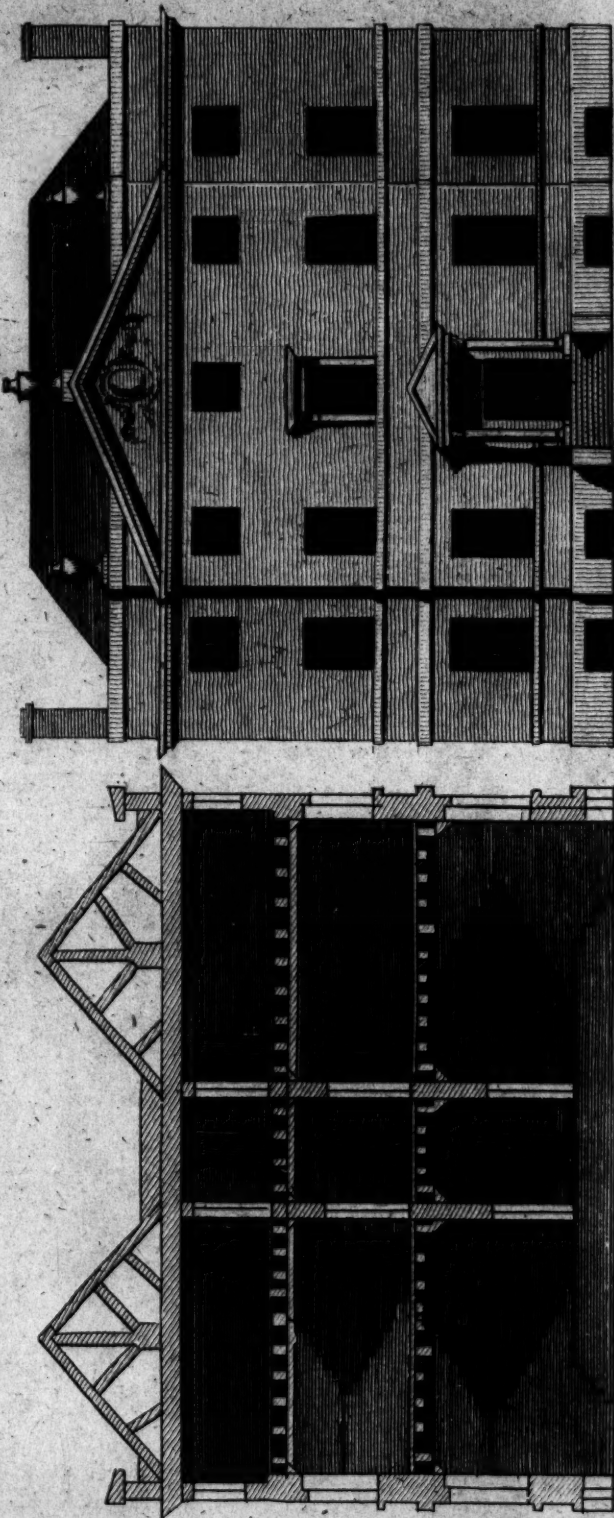
*To be lighted by a Dome or Cone Lanthorn at the top, if placed in the middle of a Building. If on the outside may be lighted by Windows in the Wall at each landing.  
To make the Hand-rail make a Templet or Cylinder to the well hole or open of the Rails, draw the tread & rise of each Step on the Cylinder, and that will give the falling of the Rail which is to be glewed in thickness bent round the Cylinder, then the Rail will come off ready squared, this is a very sure way to make the Rail.*







*Plan, Elevation & Section of a Gentleman's House, the Offices being in the Basement Story.*



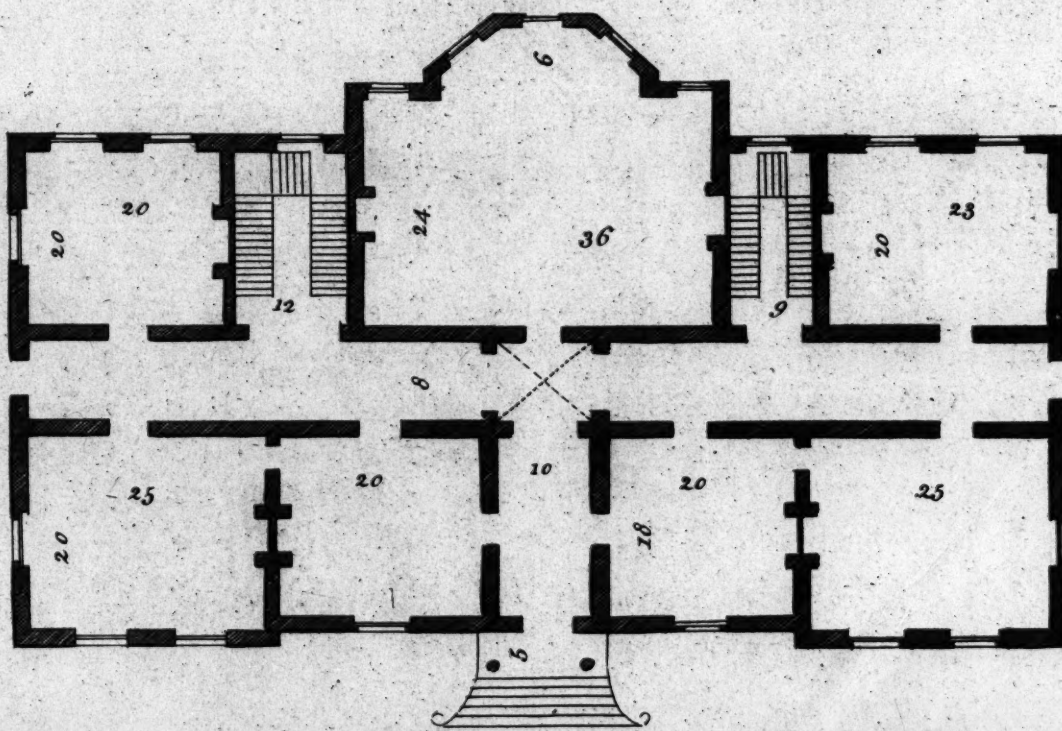
*Section of the Chimney Flues.*







*Plan and Elevation of a Gentleman's House.*

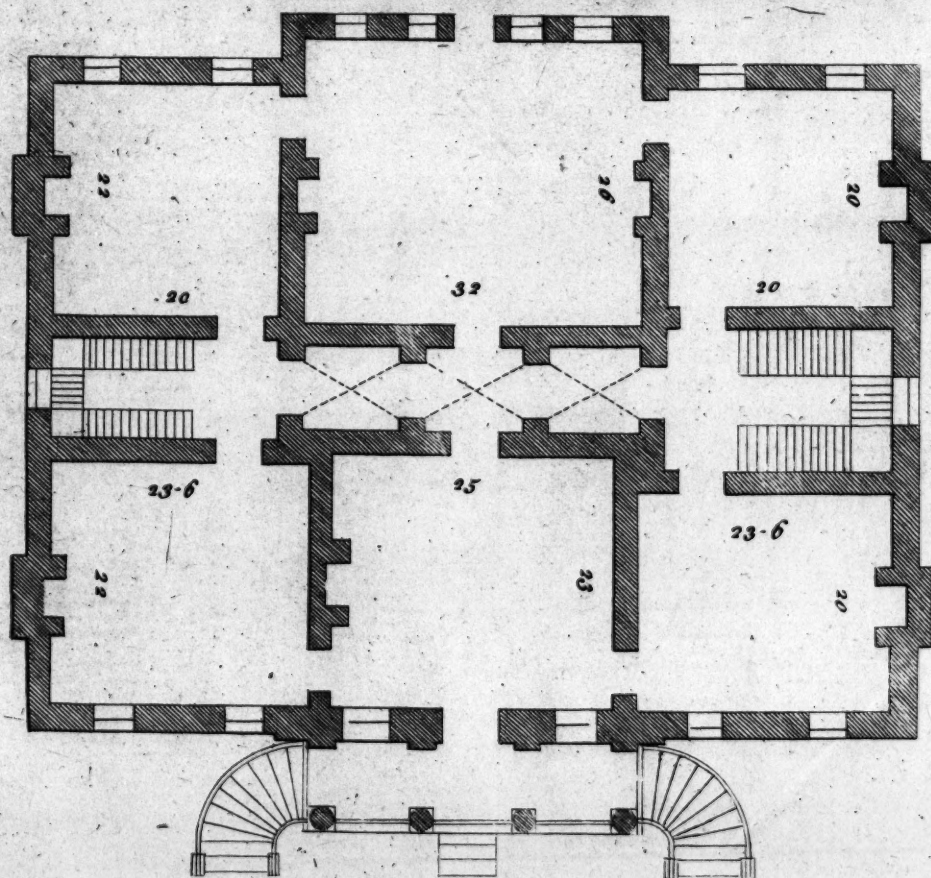
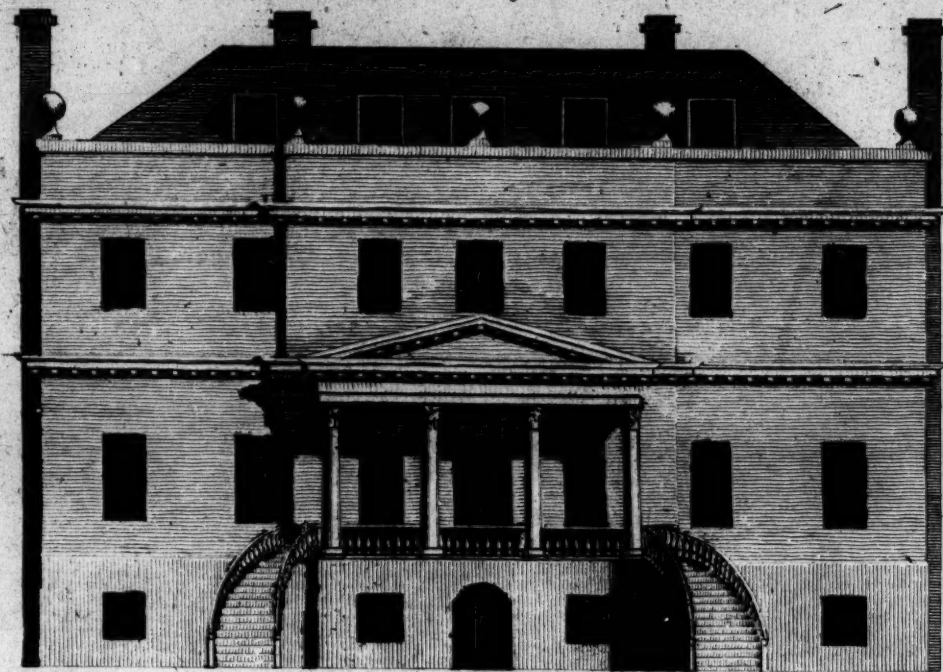








*Plan & Elevation of a Gentlemans House.*

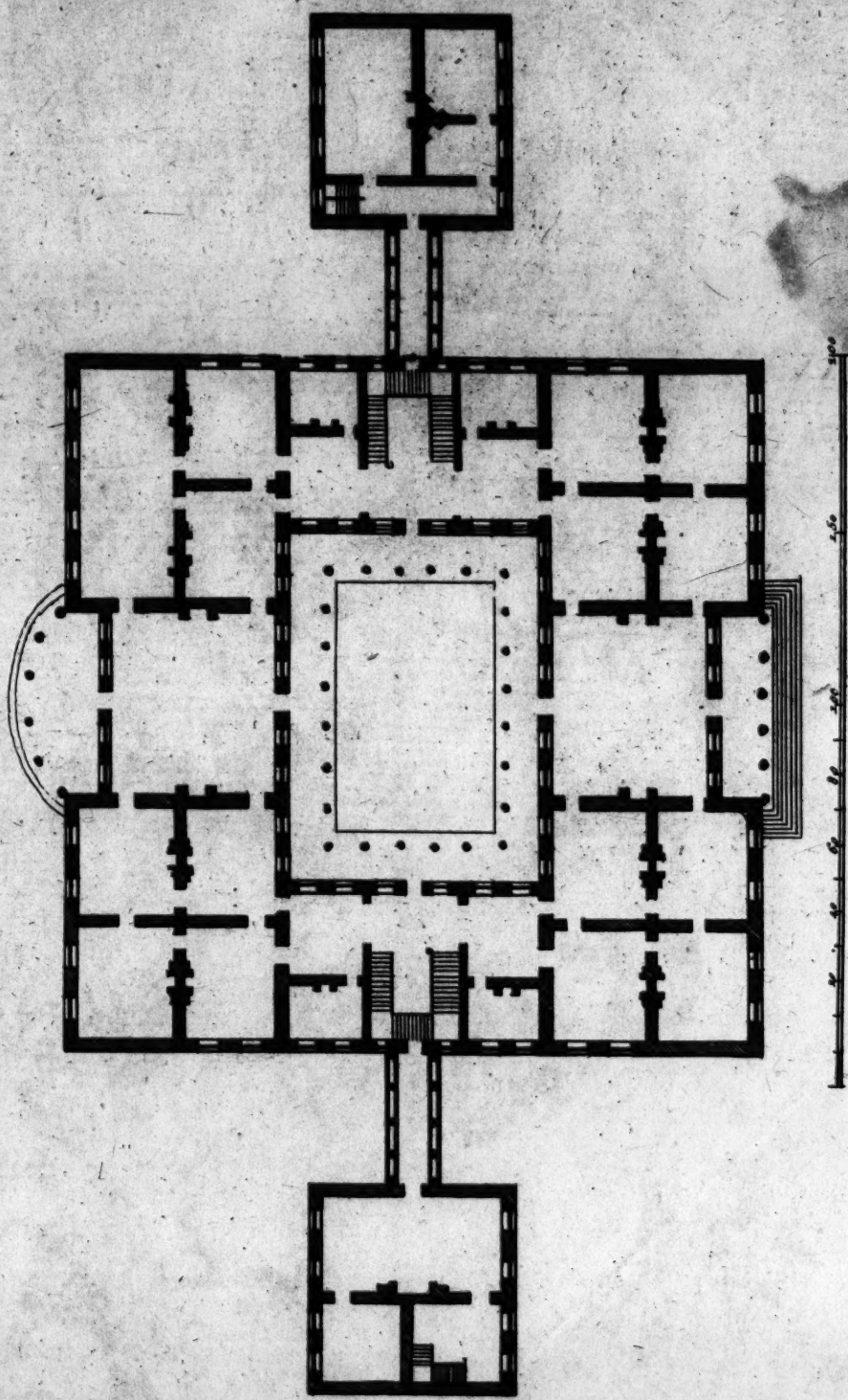
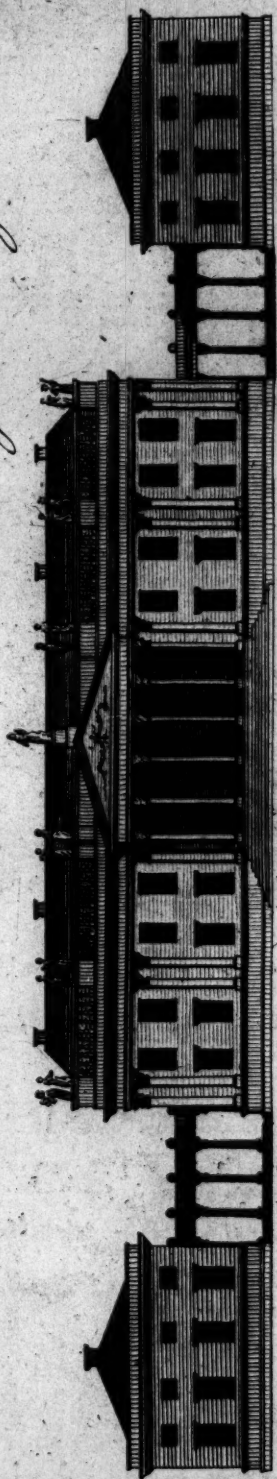








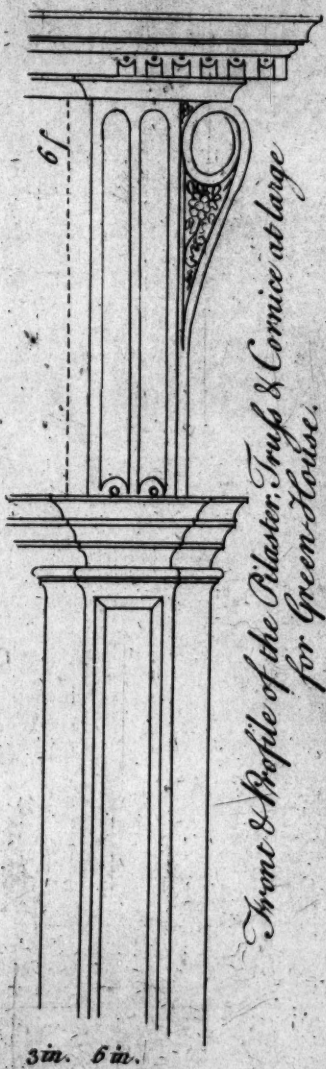
*Plan & Elevation of a House for a large Family.*



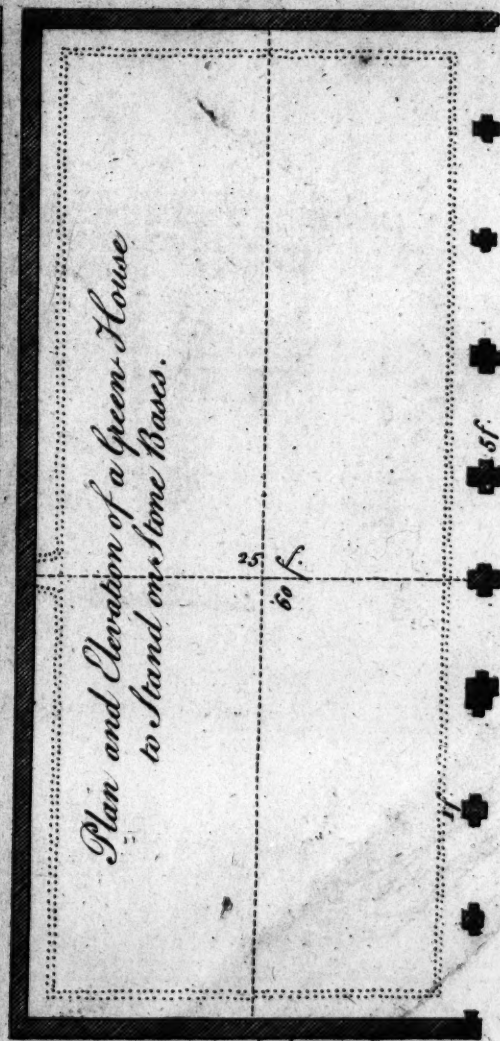
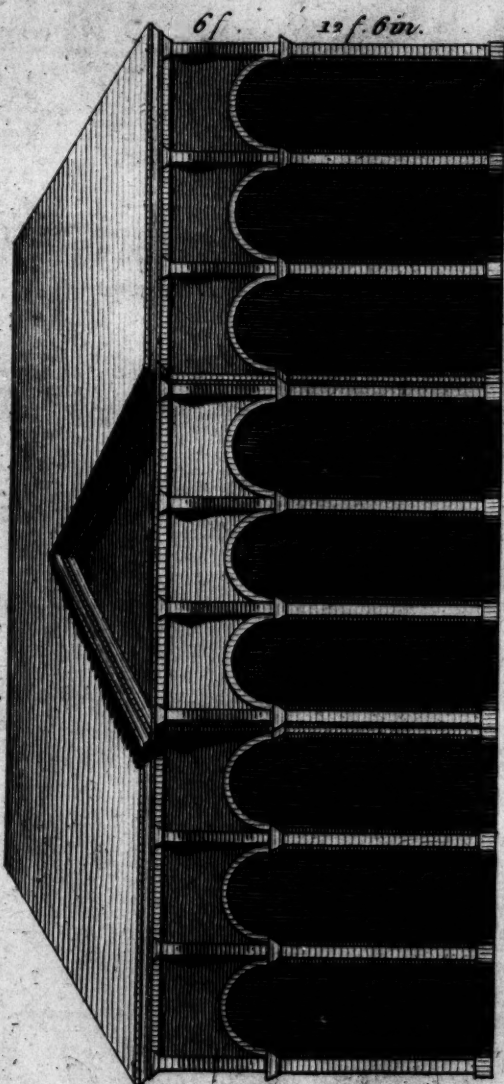






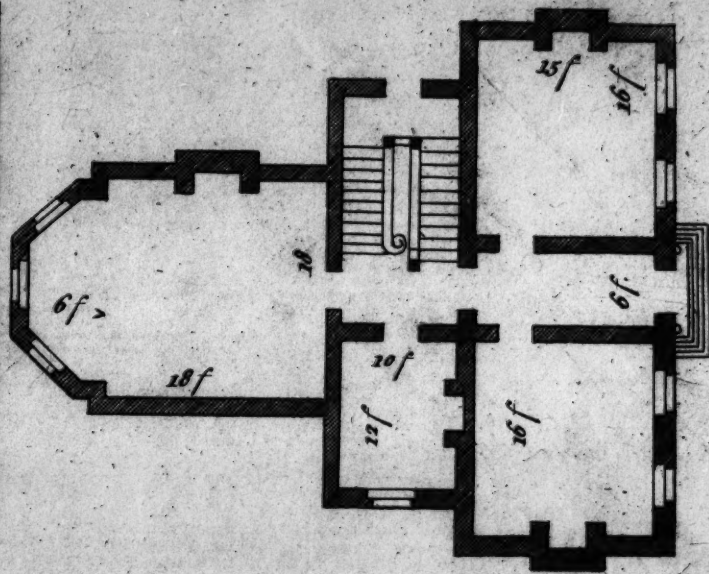


*Front & Profile of the Pilaster, Truss & Cornice at large for Green-House.*



*Plan and Elevation of a Green-House to stand on Stone Bases.*

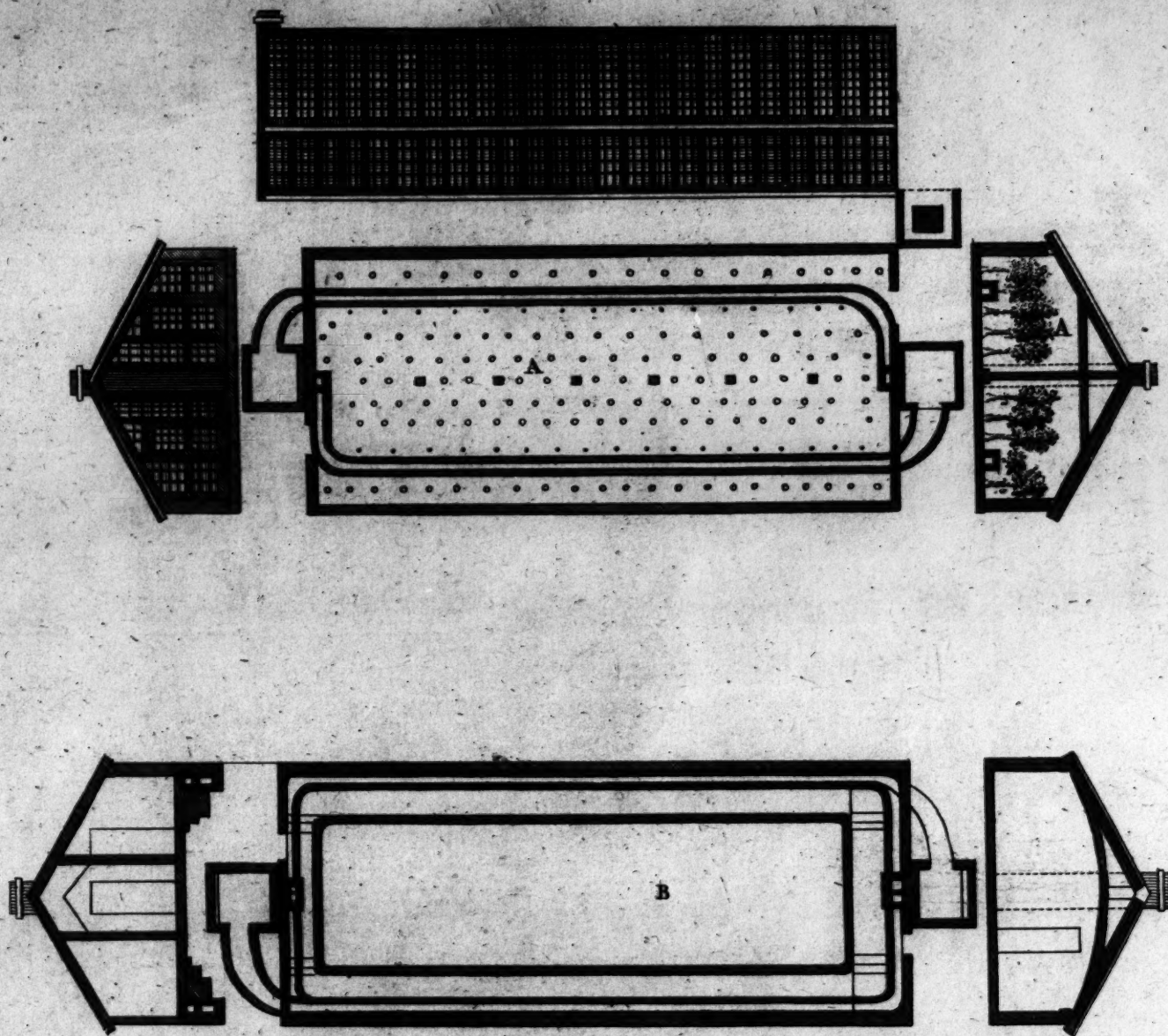
*Plan and Elevation for a Dwelling-House.*











*Two Plans, Elevations and Sections for Stoves or Hot Houses  
for Pines, Fruit Trees, Strawberry's &c.*

*The Plan and Section A. is for Fruit Trees.*

*The Plan B. for Pines; the Flues in this Plan run one over another as may be seen in the Section. There are Fire Places at each End and a Walk all round.*

*The Flues in the Plan A. Run on the Surface and are single Flues.*

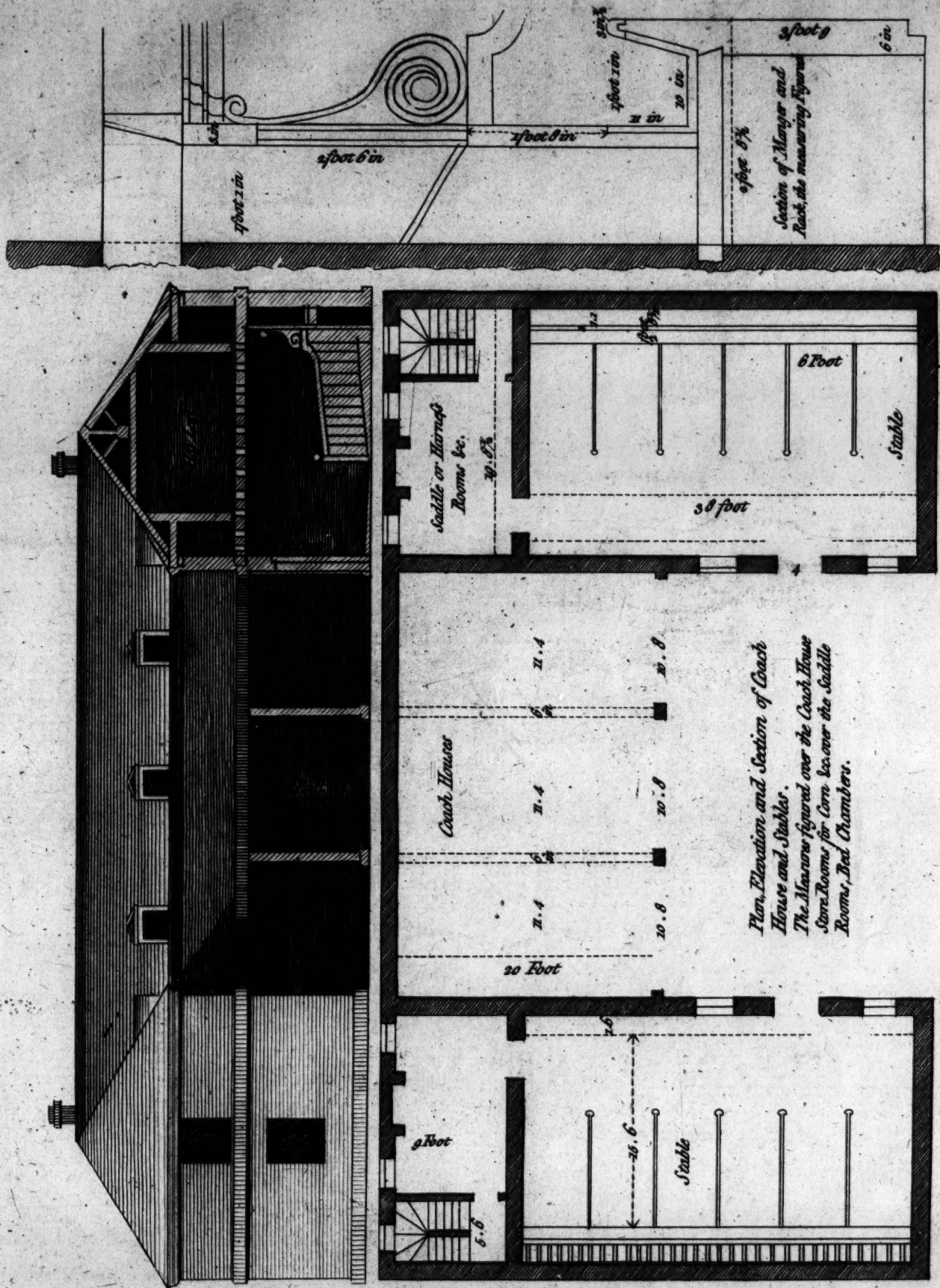
*The Front Roof and Ends Glaz'd, as the Elevation of the Plan A.*

*The Width of each House is 16 Feet the Length at Pleasure from 40 to 50 Feet. or more at pleasure.*







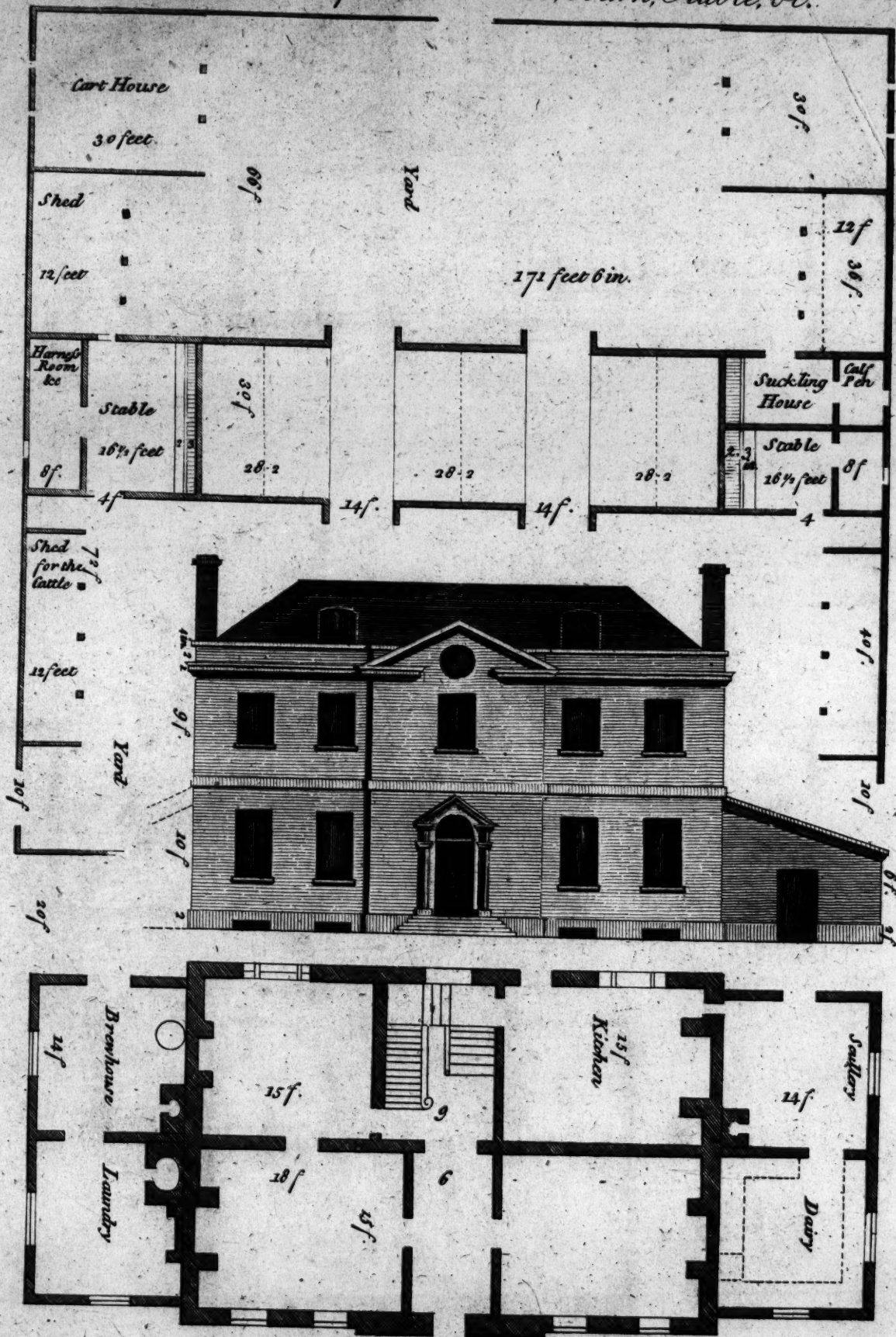








Plan & Elevation of a Farm House, Barn, Stable, &c. Plate LXXXII.

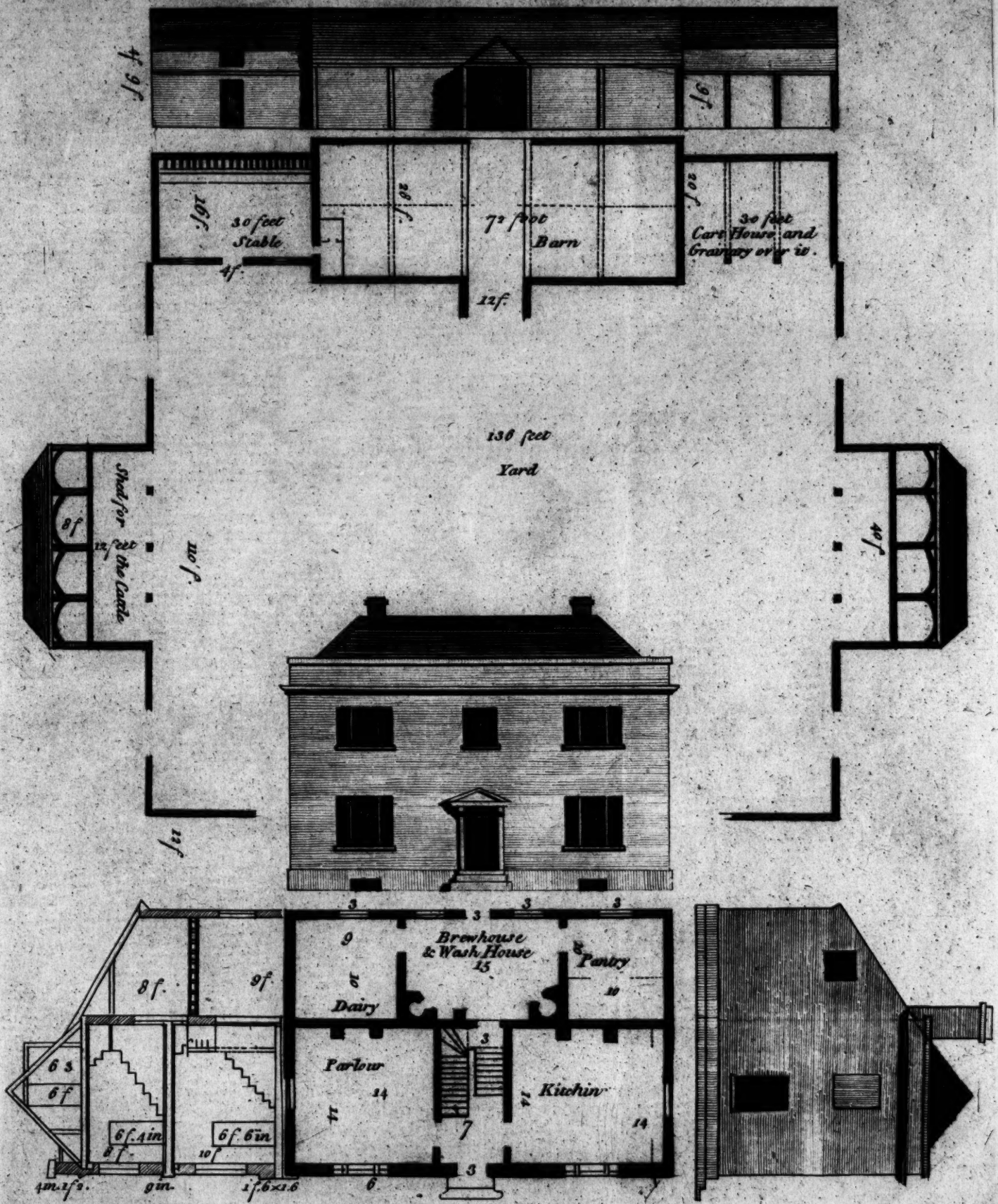








Plan, Elevation & Section &c. of a Farm-house Barns, Stables &c. Plate LXXXIII









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